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Title word cross-reference

Accelerating [BJS01]. **Accelerator** [CZL⁺15]. **Accelerators** [LAB⁺13]. **Accent** [FR86]. **Access** [AT83, LZCZ86, LP93, Smi84b, GB01]. **Access/Execute** [Smi84b]. **Accesses** [AJ19, HY92, Kel00]. **accessing** [ACM04]. **accounting** [EV03]. **accuracy** [Jim05]. **Accurate** [GVM⁺11, NTW09]. **Ace** [RR99]. **Achieve** [LLL⁺16]. **ACM** [Jha20]. **ACM/SIGOPS** [ACM88]. **across** [LBM⁺21]. **Action** [Sch84]. **Actions** [Ree83]. **Activations** [ABLL92]. **active** [SJS⁺00]. **Activity** [IRH86, MSB⁺06]. **Ad** [BYFK08, FKA10]. **Adaptable** [AC92]. **Adaptation** [BS91, AD03, FS04]. **Adaptive** [ALHH08, AS95, MLS97, CT01]. **Address** [CLFL94, SV99]. **Adrenaline** [HZL⁺17]. **Aerial** [BGK⁺21]. **Affected** [IRH86]. **Affine** [ZXD⁺23]. **Aggregate**

arc [GS93]. **N** [SHG95, Mae85].

-Body [SHG95].

11/780 [Cla83, CE85]. **1988** [ACM88].

2.6 [PTS⁺14]. **2011** [Mow12]. **2019** [MT20].

36 [Jha20].

4 [Jha20]. **432** [CGJ88, CCLP83].

780 [Cla83, CE85].

Abstract [Her86, SS84]. **abstraction** [CRL03, Kel00]. **Abstractions** [SKH⁺16].

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[GKXK13, GLPQ10]. **EOLE** [PS16]. **epidemics** [CCC⁺08]. **Eraser** [SBN⁺97]. **Error** [TS85]. **errors** [VACG09, YTEM06]. **Estimates** [KP91]. **estimation** [NTW09]. **Ethernet** [KCR11]. **Etherphone** [TS88]. **Evaluation** [ADLM21, AB86, BBH⁺98, CP94, DAH⁺12, GHPR88, MCB84, CRW01, SMS⁺03, YV02]. **Evaluator** [CCC⁺17]. **Even** [KBK⁺21]. **Event** [Bat95, BBF83, CRW01, VEK⁺07]. **Event-Based** [Bat95]. **EventGuard** [SLI11]. **evolution** [Sat02]. **Exchange** [Blu83]. **Exclusion** [AE91, BGMS89, Lam87, Mae85, Ray89, San87, SK85]. **Execute** [Smi84b]. **Execution** [CCC⁺17, GM98, MCB⁺93, KY04, NCF06, SMS⁺03]. **exokernel** [GEK⁺02]. **expansion** [SV99]. **expected** [XMM07]. **Experience** [ADK⁺07, SBN84]. **Experimental** [LE91]. **Experiments** [Atk88]. **exploitation** [HKM02]. **Exploiting** [HBD97, SJS⁺17]. **Exploring** [LAB⁺13]. **Extended** [DC90]. **Extensible** [EPP⁺12, GB01]. **Extensions** [AISS98]. **Extraction** [HS96]. **extrapolation** [GVO07].

Factor [NEC⁺15]. **Fail** [SS83, Sch84, Ske85]. **Fail-Stop** [SS83, Sch84]. **Failures** [BJ87, Mar90, QTZS07, ZMAB09]. **Fairness** [ELMP12]. **Fast** [CCW⁺17, FKM02, GEK⁺02, JBG⁺19, Jha20, Lam87, LDT⁺16, MJLF84, SV99, YSS⁺14]. **Faster** [BCK⁺21]. **Fault** [AE91, Bab87, BBG⁺89, BS96, CM89, CDD96, DD98, JB86, MC11, RBvR94, SS83, ZTQ⁺17, CL02, CRL03, KAD⁺09]. **Fault-tolerance** [CDD96]. **Fault-Tolerant** [AE91, Bab87, JB86, RBvR94, SS83]. **Faults** [PTS⁺14]. **Fay** [EPP⁺12]. **Feedback** [HMMS98, RJ90, ALHH08, DR99]. **File** [AISS98, AOG92, ADN⁺96, BKT85, CFKL96, CF96, DKM96, GJT⁺12, HDV⁺12, HO95, HP94, HKM⁺88, KS92, Koc87, KS97, LZCZ86, MBH⁺94, MJLF84, NWO88, RO92, SS96b, FKM02, GMSP00, NCF06, SFKW14, YTEM06]. **File-system** [HP94]. **Files** [HL91, SMH⁺21]. **Filesystem** [PE23]. **filter** [BMK07]. **find** [YTEM06]. **finding** [ASS⁺05]. **Fine** [JLHB88, BHSC98, Rin99]. **fine-grain** [BHSC98, Rin99]. **Fine-Grained** [JLHB88]. **Fireflies** [JVJ15]. **Firefly** [SB90a]. **firewall** [BMNW04]. **Firmato** [BMNW04]. **First** [LCWB⁺11]. **First-Class** [LCWB⁺11]. **Flash** [JLL⁺16]. **flexibility** [HS03]. **Flexible** [KA24, KS97, GEK⁺02]. **FLIP** [KvRvST93]. **Flow** [EGH⁺14, Sha89]. **Focusing** [EV03]. **Footprint** [CZL⁺15]. **Footprints** [TS87]. **Formal** [BAA90, GM87, GF93, KAE⁺14]. **Fragmentation** [PE23]. **Framework** [CCC⁺17, SLW⁺24, SYE⁺21, CKP⁺04]. **Frameworks** [CZW⁺21]. **Free** [ARJ97]. **Front** [KG21]. **Front-End** [KG21]. **Full** [LLL⁺16]. **Full-Stack** [LLL⁺16]. **fully** [RD99]. **functionality** [GB01]. **Fusion** [ZXD⁺23]. **Future** [EBS⁺12, HLZ⁺16, Kin90].

Gaining [WM87]. **Garbage** [AFG99, SKZ⁺19, KPHV11]. **gating** [BM00]. **General** [Smi86, ZR17, BJS01, CKP⁺04]. **General-Purpose** [ZR17, BJS01]. **Generalized** [MCB84, SA95]. **Generals** [Sch84]. **Generating** [MMM95]. **Generation** [AJ93, Sha83, GO05]. **generational** [HKM02]. **generic** [CBG⁺08]. **Global** [AISS98, CL85, CM89]. **Globally** [CDE⁺13]. **Gone** [ABD⁺97]. **Google** [CDE⁺13]. **Gossip** [JVG⁺07, JVJ15, JMB05]. **Gossip-based** [JVG⁺07, JMB05]. **GPU** [LSPM15, SKH⁺16]. **GPUfs** [SFKW14]. **GPUnet** [SKH⁺16]. **GPUs** [BBCS19, SMH⁺21, SFKW14]. **grain** [BHSC98, Rin99]. **Grained** [JLHB88, PPA⁺15]. **Grammars** [DD98]. **Grapevine** [SBN84]. **Graph** [DD98, ZCR⁺21, AV04, APD03]. **Graphics**

[SLJ⁺14]. **Graspan** [ZWH⁺21]. **Group** [SBS91, FLS01, KSMD02]. **Grouping** [Sta84]. **Groups** [CZ85, San88]. **Growth** [SBN84]. **Guarantee** [ZCR⁺21]. **Guest** [Lev97].

H [XBO⁺21]. **H-Container** [XBO⁺21]. **Hardware** [DRG17, GM98, GF93, HLRW93, SLW⁺24, WPB⁺14, HS03]. **HARTS** [KS91]. **hash** [NTW09]. **Haven** [BPH15]. **HDLC** [SL83]. **Heap** [DTM95]. **Heracles** [LCG⁺16]. **Heterogeneous** [BDZ⁺20, Bat95, Fal87, LWZ15, LBM⁺21, PCB⁺23, XBO⁺21, DK13, GLL14]. **Heterogeneous-ISA** [XBO⁺21]. **HFS** [KS97]. **Hidden** [RDB⁺21]. **Hierarchical** [GJT⁺12, PCB⁺23, SHG95, WGSS96]. **Hierarchies** [BCZY16, ES83, YFLS11]. **Hierarchy** [AT83]. **High** [AOST93, BPP⁺17a, BPP⁺17b, ELMP12, GY90, GFN89, KBK⁺21, KSV⁺08, LLSG92, SBWT87, Ste97, TL93, ZCY⁺24, Kel00, VVP⁺06, WVTP01]. **High-bandwidth** [KSV⁺08]. **High-level** [GY90, Kel00, VVP⁺06]. **High-Performance** [ELMP12, SBWT87, KBK⁺21]. **High-Speed** [Ste97, TL93, AOST93, GFN89, WVTP01]. **High-throughput** [ZCY⁺24]. **Highly** [SMH⁺21, SBL00]. **Hill** [CY09]. **Hill-climbing** [CY09]. **Hint** [SH00]. **Hint-based** [SH00]. **Hints** [YFLS11]. **Hipster** [NCPM17]. **Histories** [Ng89]. **Hoc** [BYFK08, FKA10]. **Holistic** [CZW⁺21]. **HOP** [GF93]. **Hot** [HY92]. **Hot-Spot** [HY92]. **HP** [WGSS96]. **HTM** [CCW⁺17]. **HW** [KMG16]. **HW/SW** [KMG16]. **Hybrid** [CZW⁺21]. **Hypercubes** [MLS97]. **Hypervisor** [BS96, SWF20]. **Hypervisor-Based** [BS96].

I/O [BMK01, CP94, Che87, HDV⁺12, Kot97, PDZ00, YSS⁺14, dBBB11].

identification [CT01]. **Identifying** [BCZY16, Kem83]. **ignoring** [EV03]. **Image** [SL83]. **Imbalance** [NDU⁺19]. **Implement** [Ng89]. **Implementation** [CFKL96, CKC12, DAH⁺12, DC85, RO92, WM87]. **Implementations** [GFN89]. **Implementing** [BN84, Ree83, Sch84]. **Implications** [SHG95]. **Implicit** [AD01]. **Improve** [GKXK13, SFKP12, CRL03, HBSBA03]. **Improved** [CM89, Jim05]. **improvement** [HSY05]. **Improving** [KP91, LCG⁺16, NCPM17, QBD⁺08, SBL05, YZP⁺12, BM00]. **In-Memory** [CCW⁺17, SKZ⁺19]. **Including** [GvB90]. **Incoherent** [LBM⁺21]. **inconsistencies** [YKKK10]. **Inconsistent** [ZSS⁺18]. **Increase** [GM98, PS16]. **Increasing** [BGMS89]. **Incrementally** [CASM08]. **Independent** [Smi86]. **Index** [Ano84a, Ano96]. **Indexed** [KH92]. **Indirect** [AJ19]. **Induced** [BW84]. **infer** [ONA04]. **Inferring** [MSB⁺06]. **Information** [Ano83, Ano84b, EGH⁺14, HS96, PBS89, San87, AD01]. **Information-Flow** [EGH⁺14]. **Informing** [HMMS98]. **Injection** [BLS⁺21, MC11]. **Inserted** [Mow98]. **Instruction** [CLD⁺19, DC22, LEL⁺97, MF90, LM01, SMS⁺03]. **Instruction-Level** [LEL⁺97]. **Integrated** [CFKL96, RD99]. **Integrating** [Sat89, SFKW14]. **Integration** [BBCS19, FR86]. **Intel** [CGJ88, CCLP83]. **Intellectual** [Bis22]. **Intensive** [DTM95]. **Inter** [XDH⁺21]. **Inter-process** [XDH⁺21]. **Interface** [Che87, Fal87, Ste97, BJS01]. **interfacing** [BI13]. **Internet** [CCC⁺08, MS01, MSB⁺06]. **Internetwork** [KvRvST93]. **Internetworks** [DC90]. **Interplay** [ZXD⁺23]. **Interposed** [ACV02]. **interposition** [RS04]. **Interprocedural** [ZWH⁺21]. **Interprocess** [BALL91, CCLP83, FR86, PBS89]. **Interrupt** [MR97]. **Interrupt-Driven**

[MR97]. **Introduction** [Jon83a, MT20, Mow12]. **intrusions** [KC05]. **Invocations** [GS93]. **IO** [PDZ00]. **IO-Lite** [PDZ00]. **ISA** [BMVS15, XBO⁺21]. **Isolation** [KA24, ZZW⁺21]. **Issue** [Jha20, Jon83b, Jon84, Jon88, MT20, Mow12, Sch83, Smi84a]. **IX** [BPP⁺17a, BPP⁺17b].

Java [GS00]. **Job** [Kam84, Kam86].

K2 [LWZ15]. **Kernel** [ABLL92, BLH20, CZ85, GS93, LSPM15, MR97, WLMD16, CG86]. **Kernels** [EPP⁺12]. **Key** [BDZ⁺20, BBF83, LLL⁺16, Oka88]. **Keys** [Blu83]. **KylinX** [ZZW⁺21].

L4 [HE16]. **Labels** [VEK⁺07]. **Language** [Fal87, GY90, SBRP12, RR99]. **languages** [HYC⁺03]. **LANs** [DC90]. **Large** [CZL⁺15, KH92, KCR11, LA93, RPC⁺13, Sat89, ZWH⁺21, ABG⁺01, JMB05, KSV⁺08]. **Large-Scale** [CZL⁺15, LA93, RPC⁺13, ZWH⁺21, ABG⁺01, KSV⁺08]. **Last** [Ske85]. **Latency** [BDZ⁺20, BPP⁺17a, BPP⁺17b, Mow98, SMH⁺21, TL93, Jim05]. **Latency-tolerant** [SMH⁺21]. **Lattice** [AJ93]. **Layers** [HP94]. **Layout** [CS83]. **Lazy** [LLSG92]. **Lead** [BCK⁺21]. **leakage** [HKM02]. **Learning** [CLD⁺19]. **Lessons** [HE16]. **Let** [HKM02]. **Level** [AISS98, ABLL92, Har87, LEL⁺97, BALL91, CASM08, GEK⁺02, GY90, KA24, Kel00, KY04, PMJPKA05, SWF20, SCZM05, VVP⁺06]. **Level-Structured** [Har87]. **Leveraging** [SFKP12]. **Liberty** [VVP⁺06]. **Library** [SJS⁺17]. **Lifetime** [HBD97, FS04]. **Lifetimes** [Slo83]. **Lightweight** [BYFK08, BALL90, EGH⁺03, SMK⁺94, SBS91, VACG09]. **Limitations** [EBS⁺12]. **Limits** [TL93, YV06]. **Linda** [CG86]. **Linearizability** [AW94]. **linked** [CKP⁺04]. **Links** [Bis22]. **Linux** [BLH20, PTS⁺14]. **Lite** [PDZ00]. **Livelock** [MR97]. **Load** [CJ10, DC22, HBD97, NDU⁺19]. **Loading** [Kam86]. **Local** [AOST93]. **Local-Area** [AOST93]. **Locality** [Mog92, HSY05, MT99]. **location** [ZCY⁺24]. **Lock** [ARJ97, GGL⁺19, IVO⁺19]. **Lock-Free** [ARJ97]. **Lock-Step** [IVO⁺19]. **Locking** [GGL⁺19, HA06, LDT⁺16]. **locks** [FH07]. **LOCKSS** [MRG⁺05]. **Log** [BDZ⁺20, RO92, YZP⁺12, BMD⁺13]. **Log-Structured** [BDZ⁺20, RO92]. **Logging** [SHCG94, VLW⁺12]. **Logic** [BAN90, GMP92, MMM95]. **Long** [HZL⁺17]. **lookups** [SV99]. **Loop** [LP93, WY13, ZXD⁺23, ZCR⁺21, MT99]. **Loop-Based** [WY13]. **Loop-carried** [ZCR⁺21]. **Loss** [PW97]. **lossless** [BA06]. **Low** [BPP⁺17a, BPP⁺17b, CDY⁺17, JB86, TL93, ZMAB09]. **Low-Latency** [TL93]. **low-overhead** [ZMAB09].

Machine [BWD⁺15, CLD⁺19, JBG⁺19, Jha20, LCWB⁺11]. **Mail** [CP86, SBL00]. **Maintenance** [AMMSB98]. **Manageability** [SBL00]. **Managed** [UNS⁺94]. **Management** [ADLM21, ABLL92, CZW⁺21, FR86, GHBRK12, HMSC88, HKB95, JB86, LE91, LLY⁺24, RSJM21, SLW⁺24, YFLS11, BMNW04, GTHR00, HLMM05, SJS⁺00, VBV03]. **Manager** [LHM⁺84b]. **Managing** [FS04, TS88, GLL14]. **Many** [RSJM21]. **Many-Core** [RSJM21]. **Markers** [BBF83]. **Market** [GLL14, MS01]. **masking** [ZMAB09]. **matching** [WVTP01]. **Matrix** [Kem83]. **Mean** [HBAK86]. **Measured** [CEC⁺96]. **Measurement** [CE85, GHPR88, IRH86, EV03]. **Measuring** [BHSR02, NYN03]. **Mechanisms** [Her87, HMMS98, Slo83, GLL14]. **Mechanistic** [NEC⁺15, EEKS09]. **Media** [AOG92, And93]. **Meet** [LSA⁺20]. **Membership** [AMMS⁺95, BYFK08, CV21, JVVJ15, KSMD02]. **Memories** [CZW⁺21, SNSC14, Str83, TS89]. **Memory**

[AJ19, BALL91, CBZ95, CCW⁺¹⁷, CZW⁺²¹, DRG17, DTM95, EJ93, ELMP12, FR86, HLRW93, HMMS98, HL07, LE91, LH89, MVZ93, MCS91, MF90, NDU⁺¹⁹, SMK⁺⁹⁴, SLW⁺²⁴, SKZ⁺¹⁹, Sta84, Ste97, ACM04, BJS01, BI13, GS00, GTHR00, HLMM05, HJK07, KSH⁺⁰⁵, YKA00, ZCR⁺²¹]. **Merge** [BDZ⁺²⁰]. **mesh** [ADMER10]. **Message** [LHM84a]. **Messages** [LSW91, RS92]. **metadata** [GMSP00]. **Metascheduling** [And93]. **Method** [AB83, Her86, QTZS07]. **Methodology** [Kem83]. **Methods** [GF93, SHG95, WB91, JL02]. **Metron** [KBK⁺²¹]. **mice** [EV03]. **Micro** [BGK⁺²¹]. **Microarchitectural** [AJ19]. **microarchitectures** [GLL14]. **microkernel** [KAE⁺¹⁴]. **Microkernels** [HE16]. **Microprocessor** [HKS⁺⁸³]. **microprocessors** [HL07]. **microsecond** [AD00]. **Microservices** [LLY⁺²⁴]. **MIDDLE** [PMJPKA05]. **MIDDLE-R** [PMJPKA05]. **middleware** [PMJPKA05]. **Migration** [BWD⁺¹⁵, XBO⁺²¹]. **Military** [LHM84a]. **MIMD** [Kot97]. **Minerva** [ABG⁺⁰¹]. **Minimal** [MSL⁺¹¹]. **Minimizing** [XMM07]. **Minimum** [MLS97]. **Minimum-Distance** [MLS97]. **mining** [VBV03]. **MIPS** [GHPR88]. **Mismatch** [FAK⁺¹²]. **Miss** [Smi85, Smi87, CT01, GO05, GVO07]. **misses** [CT01]. **Mission** [BGK⁺²¹]. **Mitigating** [NDU⁺¹⁹]. **Mixed** [WLMD16]. **Mixed-Criticality** [WLMD16]. **Mobile** [LWZ15, RLCV11, SGH⁺¹³, ZR17, AKS11]. **Mobility** [JLHB88]. **Model** [AHH89, AB86, BAA90, GVM⁺¹¹, LHM84a, MCB⁺⁹³, CBG⁺⁰⁸, EEKS09, YTEM06, YV02]. **Modeling** [IRH86, NEC⁺¹⁵, ZXD⁺²³, COM⁺⁰⁹, GVO07, VVP⁺⁰⁶]. **Models** [Bat95, JW98, GO05]. **Modern** [BMVS15, FAK⁺¹², PE23, HL07]. **Modular** [RSJM21, KMC⁺⁰⁰]. **Monitoring** [EGH⁺¹⁴, JLSU87, MRF18, Sno88, VBV03]. **Moshe** [KSMD02]. **Most** [LSW91]. **motion** [NYN03]. **Movement** [Kin90]. **Moves** [Tic84]. **Multi** [GHBK12, CKP⁺⁰⁴]. **multi-chain** [CKP⁺⁰⁴]. **Multi-Tier** [GHBK12]. **Multicast** [DC90, GMS91, SBS91, BHO⁺⁹⁹, MS01]. **Multiclient** [YFLS11]. **Multicomputers** [SB90b]. **Multicore** [BCZY16, BZF10, CKZ⁺¹⁵, ELMP12, EBS⁺¹², LDT⁺¹⁶, SFKP12, WY13, ZY17]. **Multidimensional** [AAC91]. **Multigrain** [YKA00]. **Multilevel** [GM87, YFLS11]. **multimedia** [NL03, YN06]. **Multiphase** [CGL85]. **Multiple** [AMMSB98, CZW⁺²¹, LSPM15, RS92]. **Multiple-Ring** [AMMSB98]. **Multiplication** [DC85]. **Multiplier** [CS83]. **multiprocessing** [MG01]. **Multiprocessor** [AB86, GS93, MCB84, PL85, SHG95, GO05, GVO07]. **Multiprocessors** [BALL91, BDGR97, HLRW93, Kot97, LE91, LA93, MVZ93, MCS91, Mow98, TE95, Epe98, GTHR00, HJK07, KSH⁺⁰⁵]. **Multiprogrammed** [MVZ93]. **Multiprogramming** [AHH88, Kam86]. **multisets** [NTW09]. **Multisignature** [Oka88]. **Multitenant** [KA24]. **Multithreaded** [SBN⁺⁹⁷, SMS⁺⁰³]. **Multithreading** [LEL⁺⁹⁷]. **multivariate** [GO05, GVO07]. **Multiversion** [CM86]. **Multiweight** [GS93]. **Music** [AK90]. **Mutual** [AE91, BGMS89, Lam87, Mae85, Ray89, San87, SK85]. **MVA** [BKLC84]. **Naming** [CM89, Pet88]. **near** [ASS⁺⁰⁵]. **near-optimal** [ASS⁺⁰⁵]. **Nemo** [SYE⁺²¹]. **nest** [MT99]. **Net** [CG86]. **Nets** [MCB84]. **Network** [AUQ⁺²³, ADN⁺⁹⁶, Bis22, HO95, HY92, Mog92, NWO88, OP92, Ste97, ADMER10, ACV02, AD00, BJS01, HS03, SJS⁺⁰⁰]. **Network-on-Chip** [Bis22]. **Networking** [MKH⁺²¹, SKH⁺¹⁶, GEK⁺⁰²]. **Networks** [AJ93, AOST93, BYFK08, BLS⁺²¹, CZL⁺¹⁵, ES83, Kir87, KG83, PL85, RJ90,

Rom84, Sau83a, Sau83b, SLI11, TS85, TL93, Zha91, FKA10, JMB05, KSH⁺05, SJS⁺00]. **Neural** [BLS⁺21, CZL⁺15, JL02, Jim05]. **Next** [AGK⁺15]. **NFV** [KBK⁺21]. **No** [Jha20]. **Nodes** [LBM⁺21]. **Noise** [BLS⁺21]. **Non** [BLS⁺21]. **Non-Uniform** [BLS⁺21]. **Nonblocking** [HLMM05]. **nonoperational** [GS00]. **normality** [BHSR02]. **Normalization** [LP93]. **notification** [CRW01]. **novel** [BMNW04]. **NTree** [San88]. **NUMA** [LE91, LP93].

O [BMK01, CP94, Che87, HDV⁺12, Kot97, PDZ00, YSS⁺14, dBBB11]. **obfuscation** [RS10]. **Object** [BBH⁺98, GWS96, AFG99]. **Object-Oriented** [GWS96]. **Objects** [ARJ97, GS93, Ng89, SB90b, Sta84, ADK⁺07]. **Off** [Bis22]. **offense** [WVB⁺10]. **Offloading** [GKXX13]. **On-Off** [Bis22]. **Once** [LSW91]. **online** [ZSV02]. **only** [FKM02]. **OpenMP** [LBM⁺21]. **Operating** [ACM88, AHH88, AISS98, BPP⁺17a, BPP⁺17b, BBCS19, BDGR97, CLFL94, CEC⁺96, Jon88, LWZ15, PLZ⁺16, SBWT87, WABL94, KWDB06, SBL05, VEK⁺07]. **Operation** [KS92, BM00]. **Operations** [HMMS98]. **Optimal** [KG83, ASS⁺05, GLPQ10]. **Optimality** [Kam84]. **Optimally** [MLS97]. **Optimistic** [SY85, Rin99]. **optimization** [MWP⁺01]. **Optimized** [Kir87]. **Optimizer** [SKZ⁺19]. **Optimizing** [BGK⁺21, LLY⁺24, SGH⁺13, SYE⁺21, YSS⁺14, ZXD⁺23, ZR17]. **Orca** [BBH⁺98]. **Orchestrating** [PCB⁺23]. **Order** [San88, EEKS09, GLPQ10]. **Ordered** [GMS91]. **Ordering** [AMMSB98, AMMS⁺95, Rom84]. **Oriented** [BWD⁺15, GWS96, KS97, SMS08]. **Original** [BDR⁺12]. **out-of-core** [BMK01]. **out-of-order** [EEKS09]. **overhead** [DR99, MKH⁺21, ZMAB09]. **Overlap** [BW84]. **Overlays** [BCK⁺21].

Packet [Slo83, Zha91, HVP99]. **packet-stripping** [HVP99]. **Packet-Switched** [Zha91]. **packets** [SJS⁺00]. **packing** [BM00]. **PACS** [HKS⁺83]. **Page** [KH92]. **Paged** [Sta84]. **Papers** [MT20]. **paradigm** [AMS⁺09]. **Paradigms** [PPA⁺15]. **Paragon** [DK13]. **Parallel** [AV04, BAA90, CLVW94, CF96, EJ93, GLM91, GWS96, HKS⁺83, JW98, LAB⁺13, WY13, RR99, VBR⁺04]. **parallel-programming** [VBR⁺04]. **Parallelism** [ABLL92, LEL⁺97, ALHH08]. **parallelized** [DR99, Rin99]. **Parallelizing** [VLW⁺12, CASM08]. **Parameters** [GvB90]. **Parametric** [JEJ13]. **Parity** [SHCG94]. **Parliament** [Lam98]. **Part** [Lam98]. **Part-Time** [Lam98]. **Partial** [AUQ⁺23, BWD⁺15, San88]. **partitionable** [FLS01]. **Partitioning** [AUQ⁺23, WPB⁺14, ZZNM02]. **Path** [PL85]. **Pattern** [Bis22]. **PCIe** [MKH⁺21]. **Peak** [CDY⁺17]. **Peer** [BBCS19, JVG⁺07, MRG⁺05, QBD⁺08]. **Peer-to-Peer** [BBCS19, MRG⁺05, QBD⁺08]. **Perfect** [MT99]. **Performance** [AHH88, AK90, BBH⁺98, BMVS15, CFKL96, CM86, CP94, CEC⁺96, CM89, Cla83, CE85, CDW06, CGJ88, DTM95, ES83, ELMP12, HMMS98, HKM⁺88, KS97, LZCZ86, MCB84, PL85, PS16, SS96a, SFKP12, SLJ⁺14, SB90a, SBWT87, SGH⁺13, Sta84, TR84, TS85, WB91, AV04, BM00, COM⁺09, EEKS09, HS03, HBSBA03, KBK⁺21, LN06, NYN03, QBD⁺08, SBL00]. **Performance-Oriented** [KS97]. **persistent** [AFG99]. **Personal** [AISS98, CEC⁺96, HLZ⁺16]. **Perspective** [AJ19]. **perturbation** [AKS11]. **perturbation-resilient** [AKS11]. **pervasive** [GDL⁺04]. **Petri** [MCB84]. **Pfair** [HA06]. **Physical** [LSA⁺20]. **Pipelined** [CS83]. **Pipes** [GG88]. **Pivot** [MRF18]. **Placement** [KH92]. **Planar** [AJ93]. **Plane** [PLZ⁺16]. **Platform**

[CKC12, LLL⁺16]. **Policies** [Kam86, LE91]. **Policy** [Kam84, MVZ93, GB01]. **Pooling** [NDU⁺19]. **Porcupine** [SBL00]. **Portable** [GWS96, LDT⁺16]. **Power** [BCZY16, BMVS15, CDY⁺17, EBS⁺12, EG85, GM98, GWSU13, ZTQ⁺17, BM00]. **Power-Efficient** [BCZY16]. **PowerNap** [MGW11]. **Practical** [CL02, ZMAB09, RD99]. **Practice** [LABW92]. **Pragmatic** [GGL⁺19]. **pre** [KY04]. **pre-execution** [KY04]. **Precise** [ZCR⁺21]. **Predicted** [CP94]. **Predicting** [YKKK10]. **Prediction** [GM98, PS16, SS96a, TS85, AV04, JL02, Jim05]. **Preface** [Jon83b, Jon84, Jon88, Sch83, Smi84a]. **prefetch** [CKP⁺04]. **Prefetching** [AJ19, CFKL96, Mow98, TE95, APD03, BMK01, CKP⁺04, LM01]. **prefix** [SV99, WVTP01]. **Presence** [BJ87, KBK⁺21]. **preservation** [MRG⁺05]. **Preserving** [PBS89]. **Preventing** [BDZ⁺20, YKKK10]. **Primitive** [LCWB⁺11]. **Primitives** [SBWT87, Rin99]. **Principles** [Jon88, Smi86, ACM88]. **Priority** [BKLC84]. **Privacy** [EGH⁺14]. **Proactive** [RS10, CL02]. **Probabilistic** [DRG17, FKA10, EGH⁺03]. **Problem** [AT83, Tic84, GMSP00]. **Procedure** [BALL90, BN84, Bir85]. **Procedures** [GG88]. **Process** [CZ85, HBD97, Ske85, XDH⁺21]. **Processes** [Mog92, VEK⁺07]. **Processing** [CCW⁺17, CZW⁺21, GWS96, Kam84, Kam86, PCB⁺23, SKZ⁺19, SYE⁺21, ZCR⁺21, AD00]. **Processing-in-memory** [ZCR⁺21]. **Processor** [CCLP83, GHPR88, IVO⁺19, Kam84, MVZ93, MF90, BM00, CY09]. **Processors** [CDY⁺17, CKZ⁺15, FAK⁺12, GJT⁺12, SS83, Sch84, EEKS09, RLCV11, SMS⁺03]. **Profile** [Pet88]. **Profiling** [ABD⁺97]. **Program** [Atk88, AV04, ZZNM02]. **Programmability** [LAB⁺13]. **Programmable** [Fal87, BI13].

Programming [CM88, FH07, RR99, VBR⁺04]. **Programs** [DTM95, GY90, SBN⁺97, SKH⁺16, WY13, DR99, Rin99]. **Proof** [GM87]. **Property** [Bis22]. **Protect** [Bis22]. **Protected** [BPP⁺17a, BPP⁺17b]. **Protection** [BAA90, CLFL94, HP87, San88]. **Protocol** [AMMSB98, AMMS⁺95, BBF83, GKXK13, GvB90, KvRvST93, Kir87, SL83]. **Protocols** [AB86, AGK⁺15, CM84, CGL85, KP91, SL83, Sha89, AKS11, HVP99, RR99, SMS08, VBR⁺04]. **Providing** [LLSG92]. **Provisioning** [GWSU13, ABG⁺01]. **Pseudorandom** [Sha83]. **Public** [HP87, Oka88]. **Public-Key** [Oka88]. **Publication** [Bir97]. **Publish** [CJ10, JEJ13, SLI11]. **Publish/Subscribe** [CJ10, JEJ13]. **Purpose** [ZR17, BJS01].

QoS [DK13]. **QoS-Aware** [DK13]. **Quantifying** [FAK⁺12, MT99]. **Quantitative** [JW98]. **Quantization** [BLS⁺21]. **Queueing** [ES83, KG83, Sau83a]. **Queuing** [Sau83b, TS85]. **Quick** [HZL⁺17]. **Quickly** [ASS⁺05]. **QuickSilver** [HMSC88]. **Quorum** [Her86, FKA10]. **Quorum-Consensus** [Her86].

R [LHM⁺84b, PMJPKA05]. **Race** [SBN⁺97]. **Rack** [NDU⁺19]. **Rack-Scale** [NDU⁺19]. **RAID** [CLVW94]. **RAMCloud** [OGG⁺15]. **Random** [BYFK08]. **Range** [WPB⁺14]. **rate** [GO05]. **rates** [GVO07]. **Ratio** [Smi85, Smi87]. **RaWMS** [BYFK08]. **RDMA** [CCW⁺17]. **read** [FKM02]. **read-only** [FKM02]. **Reading** [Lam90]. **Real** [ARJ97, BS91, DC22, GS93, KH92, MMM95, SBWT87, KPHV11, XMM07]. **Real-Indexed** [KH92]. **Real-Time** [BS91, GS93, MMM95, SBWT87, ARJ97, DC22, KPHV11, XMM07]. **Realtime** [EGH⁺14]. **Rearrangement** [AS95]. **Reasoning** [GMP92]. **Reassignment** [BGMS89]. **Receive** [MR97]. **Reclamation**

[ZCY+24]. **Reconfiguration** [DD98]. **record** [RD99]. **record/replay** [RD99]. **Recoverable** [SMK+94]. **Recovering** [SABL06]. **Recovery** [DKM96, HMSC88, MC11, SY85, CL02]. **RecPlay** [RD99]. **Recursive** [DC85]. **Reduce** [PS16]. **Reduced** [HL91]. **Reducing** [CBZ95, HKM02]. **Redundant** [PL85]. **Redundant-Path** [PL85]. **REEF** [CCC+17]. **Reformulating** [SWB+23]. **Register** [GJT+12, HL91, SMH+21]. **Reining** [HZL+17]. **Related** [CBZ95]. **Relational** [Sno88]. **Relations** [ZXD+23]. **Relevance** [BMVS15]. **Reliability** [Bab87, IRH86, ZTQ+17, SBL05]. **Reliable** [BJ87, CM84, GMS91, KS91, KP91, PGM89]. **Remark** [Smi87]. **Remote** [BALL90, BN84, Bir85, GG88]. **Replay** [VLW+12, RD99]. **Replicated** [Her87, JB86, YV02, YV06]. **Replication** [Her86, JBG+19, Jha20, LLSG92, ZSS+18, PMJPKA05, VACG09]. **Reputation** [ADLM21]. **request** [ACV02]. **Requests** [Kin90, LLL+16]. **Requirements** [CDY+17, JT88]. **Research** [HE16]. **Reservation** [And97]. **resilient** [AKS11]. **Resource** [HS96, Kem83, LCG+16, LLY+24, ZHD+19, ZCY+24, ABG+01, CY09, GTHR00]. **Response** [Har87, ONA04]. **Responsibility** [GKXK13]. **Responsive** [Smi86]. **Restoring** [HL91]. **Restructuring** [LP93]. **Retainable** [CCC+17]. **Retargetable** [SWF20]. **Rethink** [NVCF08]. **Reuse** [BCZY16, WY13, ZY17]. **Ring** [AMMSB98, AMMS+95]. **RISC** [BMVS15]. **River** [AD03]. **Robotics** [SBWT87]. **Robust** [GHBRK12, VBV03]. **Role** [BGK+21]. **Rollback** [GF93]. **ROME** [BCK+21]. **Round** [KP91]. **Round-Trip** [KP91]. **Router** [Bis22, KMC+00]. **Routers** [Bis22]. **Routing** [DC90, KG83, MLS97, ACV02]. **RPC** [SB90a]. **Rule** [CKZ+15, GFN89]. **Rule-Based** [GFN89]. **Run** [AD03, EJ93, GWS96, HYC+03]. **Run-Time** [EJ93, GWS96, AD03, HYC+03]. **Running** [BDZ+20, BDGR97]. **Runtime** [CT01, LBM+21]. **Rx** [QTZS07]. **Ryoan** [HZX+18].

S [CG86]. **S/Net** [CG86]. **S2E** [CKC12]. **safe** [HYC+03, QTZS07]. **sampling** [BMK07, JVG+07]. **Sandbox** [HZX+18]. **Saving** [HL91]. **Saving/Restoring** [HL91]. **Scalable** [BDGR97, CKZ+15, HLS95, HLRW93, JVVJ15, LLY+24, MCS91, WVTP01, AMS+09, ACV02, SBL00, VBV03, KCR11, NTW09]. **Scale** [CZL+15, FAK+12, GVM+11, HLZ+16, HKM+88, HZL+17, LA93, LCG+16, Mog92, NDU+19, RPC+13, ABG+01, KSV+08, ZWH+21]. **Scale-Out** [FAK+12]. **Scaling** [CV21, CP94, SLJ+14, WY13, XMM07]. **Scheduler** [ABLL92, GJT+12, KWS97, NL03]. **Scheduler-Conscious** [KWS97]. **Scheduling** [AOST93, BZF10, CFKL96, DC22, DRG17, GD87, KPHV11, Kam84, MCB+93, PS16, PGM89, SFKP12, AD01, CKP+04, DK13, Epe98, HBSBA03, HA06, HL07, QBD+08, YN06]. **Scheme** [HKB95, Oka88, RJ90]. **Scientific** [HKS+83]. **Seamless** [BBCS19]. **seance** [MG01]. **search** [RLCV11]. **SEATTLE** [KCR11]. **Second** [LLL+16]. **Secret** [Blu83, HZX+18]. **Sector** [TS89]. **Secure** [Bir85, GM87, JVVJ15, ZZNM02, FKM02, ZSV02]. **Securing** [SLI11]. **Security** [BAA90, GMP92, JT88, LHM84a, RBvR94, Sat89]. **Seer** [DRG17]. **Selective** [VACG09]. **Self** [CP94, SLJ+14]. **Self-Scaling** [CP94]. **Self-Tuning** [SLJ+14]. **Sensors** [Mar90]. **Sentinel** [MCB+93]. **Separating** [GB01]. **Separation** [WLMD16]. **Sequences** [Sha83]. **Sequential** [AW94, VLW+12]. **Serialization** [AB83]. **serious** [YTEM06]. **Server** [AB83, KG21, LLL+16, MGW11,

AFG99, ONA04, QBD⁺⁰⁸]. **server-side** [QBD⁺⁰⁸]. **Serverless** [ADN⁺⁹⁶]. **Servers** [ZHD⁺¹⁹, CDW06, ZMAB09]. **Service** [CM89, GvB90, JVVJ15, KBK⁺²¹, Pet88, CRW01, FLS01, KSMD02, KWDB06, MSB⁺⁰⁶, SBL00, BYFK08]. **Services** [JBG⁺¹⁹, Jha20, KA24, WM87, BHSC98, YV02, YV06]. **Serving** [NDU⁺¹⁹]. **Set** [CLD⁺¹⁹, SA95]. **Set-Associative** [SA95]. **Sets** [JT88]. **Shared** [ARJ97, BBH⁺⁹⁸, BALL91, CBZ95, EJ93, HLRW93, Kem83, KSH⁺⁰⁵, LH89, LLY⁺²⁴, MVZ93, MCS91, SS84, BMD⁺¹³, BJS01, GTHR00, Kel00, YKA00]. **Shared-Memory** [CBZ95, EJ93, MVZ93, MCS91, GTHR00]. **Shared-Object** [BBH⁺⁹⁸]. **Sharing** [CLFL94, LBM⁺²¹, MKH⁺²¹, ZHD⁺¹⁹, HYC⁺⁰³]. **Shielding** [BPH15]. **Shooting** [KG21]. **side** [QBD⁺⁰⁸]. **SIGOPS** [ACM88]. **Silicon** [EBS⁺¹²]. **SILK** [BDZ⁺²⁰]. **Simple** [HKB95]. **Simplified** [ZZW⁺²¹]. **Simulation** [ADLM21, AB86, CE85, SA95, VVP⁺⁰⁶, WB91]. **Simulations** [GLM91]. **Simultaneous** [LEL⁺⁹⁷, SMS⁺⁰³]. **Sinfonia** [AMS⁺⁰⁹]. **Single** [AMMS⁺⁹⁵, CLFL94, HL91, LSPM15, LLL⁺¹⁶]. **Single-Address-Space** [CLFL94]. **Single-Ring** [AMMS⁺⁹⁵]. **Single-Window** [HL91]. **Sirius** [HLZ⁺¹⁶]. **Size** [HBSBA03]. **Size-based** [HBSBA03]. **sized** [HLM05]. **sketches** [NTW09]. **SKMD** [LSPM15]. **Sleep** [BLH20]. **Sleep-in-atomic-context** [BLH20]. **slow** [NYN03]. **slow-motion** [NYN03]. **Small** [CZL⁺¹⁵, Sta84]. **Small-Footprint** [CZL⁺¹⁵]. **Smart** [SJS⁺⁰⁰, NL03]. **SmartIO** [MKH⁺²¹]. **Smartphone** [DAH⁺¹²]. **Smartphones** [EGH⁺¹⁴]. **SMesh** [ADMER10]. **SMMP** [ADK⁺⁰⁷]. **SMT** [CY09]. **Snapshots** [CL85]. **SnowFlock** [LCWB⁺¹¹]. **SoCs** [RSJM21]. **Soft** [AD00, GMSP00, VACG09]. **Software** [ADLM21, AJ19, BS91, CKZ⁺¹⁵, GGL⁺¹⁹, HP87, HLRW93, SLW⁺²⁴, Smi86, UNS⁺⁹⁴, WPB⁺¹⁴, YZP⁺¹², AD00, CBG⁺⁰⁸, MWP⁺⁰¹, QTZS07]. **Software-Managed** [UNS⁺⁹⁴]. **Solid** [SNSC14]. **Solid-State** [SNSC14]. **Solution** [AE91, AT83, GMSP00]. **Some** [BCK⁺²¹]. **Sorting** [RPC⁺¹³]. **Source** [ELMP12, KY04]. **source-level** [KY04]. **Space** [CLFL94]. **Spanner** [CDE⁺¹³]. **Sparse** [PCB⁺²³]. **Spatial** [PPA⁺¹⁵]. **SPEC'95** [MT99]. **Special** [Jon83b, Jon84, Jon88, MT20, Mow12, Sch83, Smi84a]. **Specialization** [MWP⁺⁰¹, SFKP12]. **Specialized** [ZZW⁺²¹]. **Specific** [CDY⁺¹⁷]. **Specification** [GM87, SL83]. **Specifications** [GvB90, MMM95]. **Specifying** [FLS01, HJK07]. **speculation** [CASM08, SCZM05]. **Speculative** [GM98, KMG16, MCB⁺⁹³, NCF06, SMS⁺⁰³, KAD⁺⁰⁹]. **Speed** [Ste97, TL93, AOST93, GFN89, WVTP01]. **Spikes** [BDZ⁺²⁰]. **SPIN** [BBCS19]. **Spot** [HY92]. **Sprinting** [ZFF⁺¹⁷]. **Sprite** [NWO88]. **SR** [Atk88]. **SSDs** [BBCS19, ZTQ⁺¹⁷]. **Stack** [LLL⁺¹⁶, TS89]. **Stackable** [HP94]. **STAMPede** [SCZM05]. **standards** [BI13]. **State** [JBG⁺¹⁹, Jha20, SNSC14, Sau83a, Sau83b]. **State-Dependent** [Sau83a, Sau83b]. **Stateful** [RS04]. **stateless** [SMS08]. **States** [CL85]. **Static** [KMG16, PS16, Sta84, ZWH⁺²¹]. **Stating** [JT88]. **stealing** [ALHH08]. **Step** [IVO⁺¹⁹]. **Stochastic** [MCB84]. **stock** [MS01]. **Stop** [SS83, Sch84]. **Storage** [CM88, JLL⁺¹⁶, Kem83, MSL⁺¹¹, OGG⁺¹⁵, PE23, SNSC14, SGH⁺¹³, WGSS96, YSS⁺¹⁴, ABG⁺⁰¹, ACV02, ASS⁺⁰⁵, CDG⁺⁰⁸, HSY05]. **Store** [LLL⁺¹⁶, AFG99]. **Stored** [TS88]. **Stores** [BDZ⁺²⁰]. **Strategies** [TR84, ZFF⁺¹⁷, BM00]. **Stream** [Kam84, Kam86]. **Streamline** [dBBB11]. **Streams** [HKB95]. **String** [Tic84]. **String-to-String** [Tic84]. **Striped** [HO95]. **striping** [HVP99]. **Strong** [PW97, Sha83, ZZW⁺²¹]. **Structure**

[San87]. **Structured** [BDZ⁺20, Har87, HBAK86, RO92, CDG⁺08].
Structures [Atk88, SWB⁺23, CKP⁺04, HLMM05].
Study [GF93, SS96b, ZY17, KWDB06, KY04].
Subscribe [CJ10, JEJ13, SLI11].
Subscribers [Rom84]. **Substrate** [ELMP12]. **Subsystem** [YSS⁺14].
Supercloud [SJS⁺17]. **superscalar** [EEKS09]. **Support** [ABLL92, EJ93, GS93, GWS96, HL91, XDH⁺21, AD00, BJS01, GDL⁺04, HS03, HLMM05, HYC⁺03, LM01].
Supporting [CZW⁺21, KvRvST93].
Supports [HKB95]. **survive** [QTZS07].
SW [KMG16]. **Switch** [AOST93].
Switched [MLS97, Zha91]. **symmetric** [KSH⁺05]. **Symphony** [PCB⁺23].
Symposium [ACM88]. **sync** [NVCF08].
Synchronization [HY92, KWS97, LA93, MCS91, DR99, Rin99].
Synchronized [LSW91]. **Synchronizing** [SS84]. **System** [AHH88, AISS98, AK90, AOG92, BBH⁺98, BPP⁺17a, BPP⁺17b, BBCS19, BKT85, CLFL94, Che87, CF96, DKM96, DTM95, EGH⁺14, GM87, GDL⁺04, HO95, HKM⁺88, IRH86, JLHB88, Koc87, KS97, KLS86, LHM84a, LWZ15, LLY⁺24, MJLF84, NWO88, NCPM17, OGG⁺15, PLZ⁺16, PGM89, RPC⁺13, RO92, SRC84, Sat89, SBN84, SBWT87, SS96b, SWF20, SLI11, TS88, WGSS96, WABL94, ZCR⁺21, BHSC98, BHSR02, CDG⁺08, FKM02, HP94, KWDB06, KSH⁺05, MRG⁺05, MS01, MWP⁺01, NCF06, PDZ00, RD99, SFKW14, VVP⁺06, VBV03, VEK⁺07, YTEM06, KS92].
System-level [SWF20]. **systematic** [MWP⁺01]. **Systemizing** [ZWH⁺21].
Systems [ACM88, ADLM21, AB83, ADN⁺96, And97, Bab87, Bat95, BAA90, BZF10, BDGR97, CBZ95, CL85, CEC⁺96, Che87, CJ10, CDD96, ELMP12, Fal87, GGL⁺19, GFN89, GVM⁺11, Har87, Jha20, Jon88, JB86, JLSU87, KvRvST93, Kam86, LABW92, LH89, MRF18, Mae85, MMM95, MCB84, PL85, PE23, PW97, RBvR94, SFKP12, SS83, SBWT87, Smi86, Sno88, Ste97, SY85, WLMD16, ZWH⁺21, AMS⁺09, ABG⁺01, AD01, CBG⁺08, FKA10, GMSP00, GEK⁺02, GB01, HSY05, KSV⁺08, MG01, SBL05, VBR⁺04, XMM07, YKKK10].
Tailored [dBBB11]. **Tails** [HZL⁺17].
TaintDroid [EGH⁺14]. **Taos** [WABL94].
task [AV04]. **Tax** [RDB⁺21]. **TCLS** [IVO⁺19]. **TCP** [GKXK13, ZMAB09].
TCP-based [ZMAB09]. **Technique** [BW84, VACG09]. **Techniques** [CBZ95, MWP⁺01]. **technology** [VBV03].
Tensors [PCB⁺23]. **Test** [MMM95].
Testing [GVM⁺11, MC11]. **Their** [HMMS98]. **Theory** [LABW92]. **thin** [LN06, NYN03]. **thin-client** [LN06, NYN03]. **Thread** [GJT⁺12, LEL⁺97, CASM08, SCZM05].
Thread-Level [LEL⁺97, CASM08, SCZM05]. **Throttling** [ELMP12]. **Throughput** [BPP⁺17a, BPP⁺17b, GKXK13, GJT⁺12, GLPQ10, LLL⁺16, ZCY⁺24]. **TickerTAIP** [CLVW94]. **Tier** [GHBRK12]. **Tiered** [SLW⁺24]. **Tiered-Memory** [SLW⁺24].
Tiling [ZXD⁺23]. **Time** [BS91, BGK⁺21, EJ93, GS93, GWS96, KP91, Lam98, MMM95, RS92, SBWT87, ARJ97, AD03, DC22, HYC⁺03, KPHV11, ONA04, XMM07]. **Time-Critical** [RS92].
timer [AD00]. **timers** [AD00]. **Times** [Har87]. **Timestamp** [AJ93]. **Timing** [Kem83]. **TLBs** [UNS⁺94]. **TLS** [CDW06].
TMR [PGM89]. **TOCS** [Jha20, Bir97].
Tolerable [JT88]. **Tolerance** [BBG⁺89, BS96, CM89, DD98, PW97, CL02, CRL03, CDD96, KAD⁺09]. **Tolerant** [AE91, Bab87, JB86, RBvR94, SS83, SMH⁺21].
Tolerating [Mar90, Mow98]. **tool** [ABG⁺01]. **toolkit** [BMNW04]. **tools** [MWP⁺01]. **Topologies** [SB90b]. **Topology**

[AMMSB98]. **total** [GLPQ10]. **Totem** [AMMSB98, AMMS⁺95]. **Trace** [BMK07, WB91]. **Trace-Driven** [WB91]. **Tracing** [EPP⁺12, MRF18]. **Tracking** [DC22, EGH⁺14]. **Tradeoffs** [LAB⁺13, UNS⁺94]. **Traffic** [CDD96, MF90, Zha91, EV03]. **Transaction** [BW84, CCW⁺17]. **Transactional** [DRG17]. **Transactions** [Jha20, LSA⁺20, ZSS⁺18, AKS11, CASM08]. **Transactuations** [LSA⁺20]. **Transfer** [Sha89]. **Transient** [Str83]. **Translation** [CE85]. **Transparent** [LSPM15, LBM⁺21]. **Transport** [KP91, WM87]. **Treating** [QTZS07]. **Tree** [HBAK86, Ray89]. **Tree-Based** [Ray89]. **Tree-Structured** [HBAK86]. **Trees** [SZ96, SA95]. **Trip** [KP91]. **Triple** [IVO⁺19]. **TritonSort** [RPC⁺13]. **Trust** [MSL⁺11]. **Tuning** [SLJ⁺14]. **Two** [San88]. **Types** [AC92, Her86, SS84].

Ufo [AISS98]. **UIO** [Che87]. **Ultra** [CDY⁺17]. **Ultra-Low-Power** [CDY⁺17]. **Unboundedly** [GLM91]. **Undefined** [WZKSL15]. **Understanding** [BMVS15, HDV⁺12]. **Unified** [CZW⁺21, PDZ00]. **Uniform** [BLS⁺21, Che87]. **uniprocessors** [KPHV11]. **UNIQU** [BLS⁺21]. **UNIX** [BBG⁺89, MJLF84]. **Unlock** [GGL⁺19]. **Untrusted** [BPH15, HZX⁺18]. **Upcall** [Atk88]. **update** [GMSP00]. **updates** [GMSP00]. **usage** [Epe98]. **USENIX** [MT20]. **User** [AISS98, ABLL92, BALL91, KA24]. **User-Level** [AISS98, ABLL92, BALL91, KA24]. **Using** [AB86, Bat95, BBF83, BW84, Bir85, Bis22, CCW⁺17, DD98, DC22, GM98, HZL⁺17, LLSG92, MC11, Ng89, ONA04, PBS89, SL83, SA95, YTEM06, ZY17, ZXD⁺23, AV04, DR99, FLS01, GO05, GF93, GTHR00, MT99, NYN03, Oka88, RS92, Rin99, SV99, CRL03].

V [CZ85]. **Value** [BDZ⁺20, BM00, GM98, HBAK86, LLL⁺16, PS16]. **Value-based** [BM00]. **Valued** [Mar90]. **Variable** [Sha89]. **VAX** [Cla83, CE85]. **VAX-11** [Cla83, CE85]. **VAX-11/780** [Cla83, CE85]. **VAXclusters** [KLS86]. **Vectorization** [KMG16]. **Vectorizer** [KMG16]. **Vehicles** [BGK⁺21]. **Venice** [ZHD⁺19]. **Verification** [GF93, KAE⁺14]. **Verifications** [SL83]. **Verified** [Sha89]. **Versus** [Her87, AW94]. **Vesta** [CF96]. **via** [BCZY16, BJS01, ELMP12, HKM02, LEL⁺97, SFKP12, SLJ⁺14, YZP⁺12]. **Video** [And97]. **Vigilante** [CCC⁺08]. **Virtual** [BWD⁺15, DAH⁺12, FR86, LCWB⁺11, LH89, SMK⁺94, Sta84, ZZW⁺21, BJS01, GTHR00]. **VirtualClock** [Zha91]. **Virtualization** [BDR⁺12, SLW⁺24, ZZW⁺21]. **Virtualized** [GKXK13, WLMD16]. **Vision** [HLZ⁺16]. **VLSI** [CS83]. **VM** [SGH⁺13]. **VM-Based** [SGH⁺13]. **VMware** [BDR⁺12]. **Voice** [HLZ⁺16, TS88]. **Voltage** [HZL⁺17, XMM07]. **Volume** [Jha20]. **Vote** [BGM86, BGMS89]. **Voting** [AAC91]. **Vulnerabilities** [ADLM21]. **Vulnerability** [BGM86, NEC⁺15].

Waiting [LA93]. **Walk** [BYFK08]. **WANs** [KSMD02]. **Warehouse** [HLZ⁺16, HZL⁺17]. **Warehouse-Scale** [HLZ⁺16, HZL⁺17]. **Wars** [BMVS15]. **WaveScalar** [SSM⁺07]. **web** [RLCV11, CDW06, HBSBA03, ONA04, SWB⁺23, ZR17]. **Where** [ABD⁺97, LSA⁺20]. **Wide** [SS96b, CRW01, LN06]. **Wide-Area** [SS96b, CRW01, LN06]. **Window** [HL91]. **Wireless** [BYFK08, ADMER10, FKA10]. **without** [FH07]. **Work** [LBM⁺21, ALHH08]. **work-stealing** [ALHH08]. **Workloads** [AHH88, BDZ⁺20]. **Workstation** [BDR⁺12]. **Workstations** [LZCZ86]. **World** [LSA⁺20]. **worm** [CCC⁺08]. **Write** [MBH⁺94, TS89, HJK07].

Write-Back [TS89]. **Write-Behind** [MBH⁺94]. **Writing** [Lam90].

x86 [BDR⁺12].

Years [HE16].

Zebra [HO95]. **Zero** [MKH⁺21]. **Zero-overhead** [MKH⁺21]. **Zyzyva** [KAD⁺09].

References

[AAC91] Mustaque Ahamad, Mostafa H. Ammar, and Shun Yan Cheung. Multidimensional voting. *ACM Transactions on Computer Systems*, 9(4):399–431, November 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-4/p399-ahamad/>.

Agrawal:1983:ASM

[AB83] Subhash C. Agrawal and Jeffrey P. Buzen. The aggregate server method for analyzing serialization delays in computer systems. *ACM Transactions on Computer Systems*, 1(2):116–143, May 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).

Archibald:1986:CCP

[AB86] James Archibald and Jean-Loup Baer. Cache coherence protocols: Evaluation using a multiprocessor simulation model. *ACM Transactions on*

Computer Systems, 4(4):273–298, November 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-4/p273-archibald/>.

Anderson:1997:CPW

[ABD⁺97] Jennifer M. Anderson, Lance M. Berc, Jeffrey Dean, Sanjay Ghemawat, Monika R. Henzinger, Shun-Tak A. Leung, Richard L. Sites, Mark T. Vandevoorde, Carl A. Waldspurger, and William E. Weihl. Continuous profiling: Where have all the cycles gone? *ACM Transactions on Computer Systems*, 15(4):357–390, November 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-4/p357-anderson/>.

Alvarez:2001:MAR

[ABG⁺01] Guillermo A. Alvarez, Elizabeth Borowsky, Susie Go, Theodore H. Romer, Ralph Becker-Szendy, Richard Golding, Arif Merchant, Mirjana Spasojevic, Alistair Veitch, and John Wilkes. Minerva: An automated resource provisioning tool for large-scale storage systems. *ACM Transactions on Computer Systems*, 19(4):483–518, November 2001. CODEN ACSYEC. ISSN 0734-

2071 (print), 1557-7333 (electronic).

Anderson:1992:SAE

- [ABLL92] Thomas E. Anderson, Brian N. Bershad, Edward D. Lazowska, and Henry M. Levy. Scheduler activations: Effective kernel support for the user-level management of parallelism. *ACM Transactions on Computer Systems*, 10(1):53–79, February 1992. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-1/p53-anderson/> [ACM04]

Atkins:1992:ACC

- [AC92] M. S. Atkins and M. Y. Coady. Adaptable concurrency control for atomic data types. *ACM Transactions on Computer Systems*, 10(3):190–225, August 1992. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-3/p190-atkins/> [AD00]

ACM:1988:ASS

- [ACM88] ACM, editor. *1988 ACM/SIGOPS Symposium on Operating Systems Principles*, volume 6(1) of *ACM Transactions on Computer Systems*. ACM Press, New York, NY 10036, USA, February 1988. CODEN ACSYEC. ISSN 0734-

2071 (print), 1557-7333 (electronic).

Ashok:2004:CCE

Raksit Ashok, Saurabh Chheda, and Csaba Andras Moritz. Coupling compiler-enabled and conventional memory accessing for energy efficiency. *ACM Transactions on Computer Systems*, 22(2):180–213, May 2004. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Anderson:2002:IRR

Darrell C. Anderson, Jeffrey S. Chase, and Amin M. Vahdat. Interposed request routing for scalable network storage. *ACM Transactions on Computer Systems*, 20(1):25–48, February 2002. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Aron:2000:STE

Mohit Aron and Peter Druschel. Soft timers: efficient microsecond software timer support for network processing. *ACM Transactions on Computer Systems*, 18(3):197–228, 2000. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/articles/journals/tocs/2000-18-3/p197-aron/p197-aron.pdf>; <http://www.acm.org/pubs/citations/journals/tocs/2000-18-3/p197-aron/>.

- [AD01] **Arpaci-Dusseau:2001:ICC**
 Andrea Carol Arpaci-Dusseau. Implicit coscheduling: coordinated scheduling with implicit information in distributed systems. *ACM Transactions on Computer Systems*, 19(3):283–331, 2001. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/2001-19-3/p283-arpaci-dusseau/>.
 [ADMER10]
- [AD03] **Arpaci-Dusseau:2003:RTA**
 Remzi H. Arpaci-Dusseau. Run-time adaptation in River. *ACM Transactions on Computer Systems*, 21(1):36–86, February 2003. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [ADK⁺07] **Appavoo:2007:EDO**
 Jonathan Appavoo, Dilma Da Silva, Orran Krieger, Marc Auslander, Michal Ostrowski, Bryan Rosenburg, Amos Waterland, Robert W. Wisniewski, Jimi Xenidis, Michael Stumm, and Livio Soares. Experience distributing objects in an SMMP OS. *ACM Transactions on Computer Systems*, 25(3):6:1–6:??, August 2007. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [ADLM21] **Agate:2021:SSE**
 Vincenzo Agate, Alessandra De Paola, Giuseppe Lo Re, and Marco Morana. A simulation software for the evaluation of vulnerabilities in reputation management systems. *ACM Transactions on Computer Systems*, 37(1–4):6:1–6:30, June 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3458510>.
Amir:2010:SWM
 Yair Amir, Claudiu Danilov, Raluca Musuãloiu-Elefteri, and Nilo Rivera. The SMesh wireless mesh network. *ACM Transactions on Computer Systems*, 28(3):6:1–6:??, September 2010. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [ADN⁺96] **Anderson:1996:SNF**
 Thomas E. Anderson, Michael D. Dahlin, Jeanna M. Neeffe, David A. Patterson, Drew S. Roselli, and Randolph Y. Wang. Serverless network file systems. *ACM Transactions on Computer Systems*, 14(1):41–79, February 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1996-14-1/p41-anderson/>.
- [AE91] **Agrawal:1991:EFT**
 Divyakant Agrawal and Amr El Abbadi. An efficient and fault-tolerant solution

- for distributed mutual exclusion. *ACM Transactions on Computer Systems*, 9(1):1–20, February 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-1/p1-agrawal/>.
- [AFG99] Laurent Amsaleg, Michael J. Franklin, and Olivier Gruber. Garbage collection for a client-server persistent object store. *ACM Transactions on Computer Systems*, 17(3):153–201, August 1999. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/1999-17-3/p153-amsaleg/>.
- [AGK⁺15] Pierre-Louis Aublin, Rachid Guerraoui, Nikola Knezević, Vivien Quéma, and Marko Vukolić. The next 700 BFT protocols. *ACM Transactions on Computer Systems*, 32(4):12:1–12:??, January 2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [AHH88] Anant Agarwal, John Hennessy, and Mark Horowitz. Cache performance of operating system and multiprogramming workloads. *ACM Transactions on Computer Systems*, 6(4):393–431, November 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-4/p393-agrawal/>.
- [AHH89] Anant Agarwal, Mark Horowitz, and John Hennessy. An analytical cache model. *ACM Transactions on Computer Systems*, 7(2):184–215, May 1989. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-2/p184-agrawal/>.
- [AISS98] Albert D. Alexandrov, Maximilian Ibel, Klaus E. Schauser, and Chris J. Scheiman. Ufo: a personal global file system based on user-level extensions to the operating system. *ACM Transactions on Computer Systems*, 16(3):207–233, August 1998. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1998-16-3/p207-alexandrov/>.
- [AJ93] Paul Ammann and Sushil Jajodia. Distributed timestamp generation in planar lattice networks. *ACM Transactions on*

- Computer Systems*, 11(3):205–225, August 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-3/p205-ammann/> [ALHH08].
- [AJ19] **Ainsworth:2019:SPI**
Sam Ainsworth and Timothy M. Jones. Software prefetching for indirect memory accesses: a microarchitectural perspective. *ACM Transactions on Computer Systems*, 36(3):8:1–8:??, August 2019. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3319393.
- [AK90] **Anderson:1990:SCM**
David P. Anderson and Ron Kuivila. A system for computer music performance. *ACM Transactions on Computer Systems*, 8(1):56–82, February 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-1/p56-anderson/> [AMMSB98].
- [AKS11] **Ayari:2011:DPR**
Brahim Ayari, Abdelmajid Khelil, and Neeraj Suri. On the design of perturbation-resilient atomic commit protocols for mobile transactions. *ACM Transactions on Computer Systems*, 29(3):7:1–7:??, August 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1995-13-4/p311-amir/>.
- [AMMS⁺95] **Amir:1995:TSR**
Y. Amir, L. E. Moser, P. M. Melliar-Smith, D. A. Agarwal, and P. Ciarfella. The Totem single-ring ordering and membership protocol. *ACM Transactions on Computer Systems*, 13(4):311–342, November 1995. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1995-13-4/p311-amir/>.
- [AMMSB98] **Agarwal:1998:TMR**
D. A. Agarwal, L. E. Moser, P. M. Melliar-Smith, and R. K. Budhia. The Totem multiple-ring ordering and topology maintenance protocol. *ACM Transactions on Computer Systems*, 16(2):93–132, May 1998. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1998-5-2/p93-agarwal/>.
- [ALHH08] **Agrawal:2008:AWS**
Kunal Agrawal, Charles E. Leiserson, Yuxiong He, and Wen Jing Hsu. Adaptive work-stealing with parallelism feedback. *ACM Transactions on Computer Systems*, 26(3):7:1–7:32, September 2008. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

- 80/pubs/citations/journals/tocs/1998-16-2/p93-agarwal/ . [Ano83]
- [AMS⁺09] Marcos K. Aguilera, Arif Merchant, Mehul Shah, Alistair Veitch, and Christos Karamanolis. Sinfonia: a new paradigm for building scalable distributed systems. *ACM Transactions on Computer Systems*, 27(3):5:1–5:48, November 2009. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Ano84a]
- [And93] David P. Anderson. Metascheduling for continuous media. *ACM Transactions on Computer Systems*, 11(3):226–252, August 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-3/p226-anderson/> . [Ano84b]
- [And97] David P. Anderson. Device reservation in audio/video editing systems. *ACM Transactions on Computer Systems*, 15(2):111–133, May 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-2/p111-anderson/> . [Ano96]
- [Anonymous:1983:IA] Anonymus. Information for authors. *ACM Transactions on Computer Systems*, 1(1):93–95, February 1983. ISSN 0734-2071 (print), 1557-7333 (electronic). [Anonymous:1984:I] Anonymus. Index. *ACM Transactions on Computer Systems*, 1(4):370–371, November 1984. ISSN 0734-2071 (print), 1557-7333 (electronic). [Anonymous:1984:IA] Anonymus. Information for authors. *ACM Transactions on Computer Systems*, 2(3):274–276, August 1984. ISSN 0734-2071 (print), 1557-7333 (electronic). [Anonymous:1996:AI] Anonymus. Author index. *ACM Transactions on Computer Systems*, 14(4):429–430, November 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL http://www.acm.org:80/pubs/citations/journals/tocs/1996-14-4/p429-author_index/ . [Anderson:1992:FSC] David P. Anderson, Yoshitomo Osawa, and Ramesh Govindan. A file system for continuous media. *ACM Transactions on Computer Systems*, 10(4):311–337, November 1992. CODEN ACSYEC. ISSN 0734-2071

- (print), 1557-7333 (electronic).
 URL <http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-4/p311-anderson/>
- [AOST93] Thomas E. Anderson, Susan S. Owicki, James B. Saxe, and Charles P. Thacker. High-speed switch scheduling for local-area networks. *ACM Transactions on Computer Systems*, 11(4):319–352, November 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-4/p319-anderson/> [AS95]
- [APD03] Murali Annavaram, Jignesh M. Patel, and Edward S. Davidson. Call graph prefetching for database applications. *ACM Transactions on Computer Systems*, 21(4):412–444, November 2003. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [AT83]
- [ARJ97] James H. Anderson, Srikanth Ramamurthy, and Kevin Jeffrey. Real-time computing with lock-free shared objects. *ACM Transactions on Computer Systems*, 15(2):134–165, May 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Atk88]
- URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-2/p134-anderson/>
- Akyurek:1995:ABR**
- Sedat Akyürek and Kenneth Salem. Adaptive block rearrangement. *ACM Transactions on Computer Systems*, 13(2):89–121, May 1995. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1995-13-2/p89-akyurek/>
- Anderson:2005:QFN**
- Eric Anderson, Susan Spence, Ram Swaminathan, Mahesh Kallahalla, and Qian Wang. Quickly finding near-optimal storage designs. *ACM Transactions on Computer Systems*, 23(4):337–374, November 2005. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Akl:1983:CSP**
- Selim G. Akl and Peter D. Taylor. Cryptographic solution to a problem of access control in a hierarchy. *ACM Transactions on Computer Systems*, 1(3):239–248, August 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Atkins:1988:ESD**
- M. Stella Atkins. Experiments in SR with different upcall program structures.

- ACM Transactions on Computer Systems*, 6(4):365–392, November 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-4/p365-atkins/>.
- [AUQ⁺23] Basil Alkhatib, Sreeharsha Udayashankar, Sara Qunaibi, Ahmed Alquraan, Mohammed Alfatafta, Wael Al-Manasrah, Alex Depoutovitch, and Samer Al-Kiswany. Partial network partitioning. *ACM Transactions on Computer Systems*, 41(1–4):1:1–1:??, November 2023. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3576192>.
- [AV04] Vikram S. Adve and Mary K. Vernon. Parallel program performance prediction using deterministic task graph analysis. *ACM Transactions on Computer Systems*, 22(1):94–136, February 2004. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [AW94] Hagit Attiya and Jennifer L. Welch. Sequential consistency versus linearizability. *ACM Transactions on Computer Systems*, 12(2):91–122, May 1994. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1994-12-2/p91-attiya/>.
- [Alkhatib:2023:PNP] Basil Alkhatib, Sreeharsha Udayashankar, Sara Qunaibi, Ahmed Alquraan, Mohammed Alfatafta, Wael Al-Manasrah, Alex Depoutovitch, and Samer Al-Kiswany. Partial network partitioning. *ACM Transactions on Computer Systems*, 41(1–4):1:1–1:??, November 2023. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3576192>.
- [BAA90] Glenn S. Benson, Ian F. Akyildiz, and William F. Aelbe. A formal protection model of security in centralized, parallel, and distributed systems. *ACM Transactions on Computer Systems*, 8(3):183–213, August 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-3/p183-benson/>.
- [Barr:2006:EAL] Kenneth C. Barr and Krste Asanović. Energy-aware lossless data compression. *ACM Transactions on Computer Systems*, 24(3):250–291, August 2006. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Bab87] Özalp Babaoglu. On the reliability of consensus-based fault-tolerant distributed computing systems. *ACM Transactions on Computer Systems*, 5(4):394–416, November 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Benson:1990:FPM] Glenn S. Benson, Ian F. Akyildiz, and William F. Aelbe. A formal protection model of security in centralized, parallel, and distributed systems. *ACM Transactions on Computer Systems*, 8(3):183–213, August 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-3/p183-benson/>.
- [Babaoglu:1987:RCB] Özalp Babaoglu. On the reliability of consensus-based fault-tolerant distributed computing systems. *ACM Transactions on Computer Systems*, 5(4):394–416, November 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

- URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-4/p394-babaoglu/>
- [Bad86] **Badal:1986:DDD** D. Z. Badal. The distributed deadlock detection algorithm. *ACM Transactions on Computer Systems*, 4(4):320–337, November 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-4/p320-badal/>
- [BAN90] **Burrows:1990:LA** Michael Burrows, Martin Abadi, and Roger Needham. A logic of authentication. *ACM Transactions on Computer Systems*, 8(1):18–36, February 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-1/p18-burrows/>
- [BALL90] **Bershad:1990:LRP** Brian N. Bershad, Thomas E. Anderson, Edward D. Lazowska, and Henry M. Levy. Lightweight remote procedure call. *ACM Transactions on Computer Systems*, 8(1):37–55, February 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-1/p37-bershad/>
- [Bat95] **Bates:1995:DHD** Peter C. Bates. Debugging heterogeneous distributed systems using event-based models of behavior. *ACM Transactions on Computer Systems*, 13(1):1–31, February 1995. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1995-13-1/p1-bates/>
- [BALL91] **Bershad:1991:ULI** Brian N. Bershad, Thomas E. Anderson, Edward D. Lazowska, and Henry M. Levy. User-level interprocess communication for shared memory multiprocessors. *ACM Transactions on Computer Systems*, 9(2):175–198, May 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-2/p175-bershad/>
- [BBCS19] **Bergman:2019:SSO** Shai Bergman, Tanya Brokhman, Tzachi Cohen, and Mark Silberstein. SPIN: Seamless operating system integration of peer-to-peer DMA between SSDs and GPUs. *ACM Transactions on Computer Systems*, 36(2):5:1–5:??, April 2019. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://www.acm.org:80/pubs/citations/journals/tocs/1991-9-2/p175-bershad/>

- [//dl.acm.org/ft_gateway.cfm?id=3309987](https://dl.acm.org/ft_gateway.cfm?id=3309987).
- [BBF83] R. K. Bauer, T. A. Berson, and R. J. Feiertag. A key distribution protocol using event markers. *ACM Transactions on Computer Systems*, 1(3):249–255, August 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [BBG⁺89] Anita Borg, Wolfgang Blau, Wolfgang Graetsch, Ferdinand Herrmann, and Wolfgang Oberle. Fault tolerance under UNIX. *ACM Transactions on Computer Systems*, 7(1):1–24, February 1989. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-1/p1-borg/>.
- [BBH⁺98] Henri E. Bal, Raoul Bhoedjang, Rutger Hofman, Cerial Jacobs, Koen Langendoen, Tim Rühl, and M. Frans Kaashoek. Performance evaluation of the Orca shared-object system. *ACM Transactions on Computer Systems*, 16(1):1–40, February 1998. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1998-16-1/p1-bal/>.
- [BCK⁺21] Marcel Blöcher, Emilio Coppa, Pascal Kleber, Patrick Eugster, William Culhane, and Masoud Saeida Ardekani. ROME: All overlays lead to aggregation, but some are faster than others. *ACM Transactions on Computer Systems*, 39(1–4):4:1–4:??, November 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3516430>.
- [BCZY16] Michael Badamo, Jeff Casarona, Minshu Zhao, and Donald Yeung. Identifying power-efficient multicore cache hierarchies via reuse distance analysis. *ACM Transactions on Computer Systems*, 34(1):3:1–3:??, April 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [BDGR97] Edouard Bugnion, Scott Devine, Kinshuk Govil, and Mendel Rosenblum. Disco: Running commodity operating systems on scalable multiprocessors. *ACM Transactions on Computer Systems*, 15(4):412–447, November 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-4/p412-bugnion/>.

- [BDR⁺12] **Bugnion:2012:BVX**
 Edouard Bugnion, Scott Devine, Mendel Rosenblum, Jeremy Sugerman, and Edward Y. Wang. Bringing virtualization to the x86 architecture with the original VMware workstation. *ACM Transactions on Computer Systems*, 30(4):12:1–12:51, November 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [BDZ⁺20] **Balmau:2020:SPL**
 Oana Balmau, Florin Dinu, Willy Zwaenepoel, Karan Gupta, Ravishankar Chandhramoorthi, and Diego Didona. SILK+ preventing latency spikes in log-structured merge key-value stores running heterogeneous workloads. *ACM Transactions on Computer Systems*, 36(4):12:1–12:27, June 2020. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3380905>.
- [BGK⁺21] **Boroujerdian:2021:RCA**
 Behzad Boroujerdian, Hasan Genc, Srivatsan Krishnan, Bardenus Pieter Duisterhof, Brian Plancher, Kayvan Mansoorshahi, Marcelino Almeida, Wenzhi Cui, Aleksandra Faust, and Vijay Janapa Reddi. The role of compute in autonomous micro aerial vehicles: Optimizing for mission time and energy efficiency. *ACM Transactions on Computer Systems*, 39(1–4):3:1–3:??, November 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3511210>.
- [BGM86] **Barbara:1986:VVA**
 Daniel Barbara and Héctor García-Molina. The vulnerability of vote assignments. *ACM Transactions on Computer Systems*, 4(3):187–213, August 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-3/p187-barbara/>.
- [BGMS89] **Barbara:1989:IAU**
 Daniel Barbara, Héctor García-Molina, and Annemarie Spauster. Increasing availability under mutual exclusion constraints with dynamic vote reassignment. *ACM Transactions on Computer Systems*, 7(4):394–426, November 1989. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-4/p394-barbara/>.
- [BHO⁺99] **Birman:1999:BM**
 Kenneth P. Birman, Mark Hayden, Ozgur Ozkasap, Zhen Xiao, Mihai Budiu, and Yaron Minsky. Bimodal multicast. *ACM Transactions on Com-*

- puter Systems*, 17(2):41–88, May 1999. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/1999-17-2/p41-birman/>.
- [BHSC98] Nina T. Bhatti, Matti A. Hiltunen, Richard D. Schlichting, and Wanda Chiu. Coyote: a system for constructing fine-grain configurable communication services. *ACM Transactions on Computer Systems*, 16(4):321–366, November 1998. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1998-16-4/p321-bhatti/>.
- [BHSR02] Mark Burgess, Hårek Haugerud, Sigmund Straumsnes, and Trond Reitan. Measuring system normality. *ACM Transactions on Computer Systems*, 20(2):125–160, May 2002. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [BI13] Mahdi Nazm Bojnordi and Engin Ipek. A programmable memory controller for the DDRx interfacing standards. *ACM Transactions on Computer Systems*, 31(4):11:1–11:??, December 2013. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Bir85] Andrew D. Birrell. Secure communication using remote procedure calls. *ACM Transactions on Computer Systems*, 3(1):1–14, February 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-1/p1-birrell/>.
- [Bir97] Kenneth P. Birman. Editorial: Electronic publication of TOCS. *ACM Transactions on Computer Systems*, 15(1):1, February 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-1/p1-birman/>.
- [Bis22] Arnab Kumar Biswas. Using pattern of on-off routers and links and router delays to protect network-on-chip intellectual property. *ACM Transactions on Computer Systems*, 40(1–4):2:1–2:??, November 2022. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3548680>.

Birman:1987:RCP

- [BJ87] Kenneth P. Birman and Thomas A. Joseph. Reliable communication in the presence of failures. *ACM Transactions on Computer Systems*, 5(1):47–76, February 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-1/p47-birman/>.

Brown:1985:AFS

- Mark R. Brown, Karen N. Kolling, and Edward A. Taft. The Alpine file system. *ACM Transactions on Computer Systems*, 3(4):261–293, November 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-4/p261-brown/>.

Bilas:2001:ASV

- [BJS01] Angelos Bilas, Dongming Jiang, and Jaswinder Pal Singh. Accelerating shared virtual memory via general-purpose network interface support. *ACM Transactions on Computer Systems*, 19(1):1–35, 2001. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/articles/journals/tocs/2001-19-1/p1-bilas/p1-bilas.pdf>; <http://www.acm.org/pubs/citations/journals/tocs/2001-19-1/p1-bilas/>.

[BLH20]

- Jia-Ju Bai, Julia Lawall, and Shi-Min Hu. Effective detection of sleep-in-atomic-context bugs in the Linux kernel. *ACM Transactions on Computer Systems*, 36(4):10:1–10:30, June 2020. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3381990>.

Bai:2020:EDS**Baskin:2021:UUN**

- [BKLC84] Raymond M. Bryant, Anthony E. Krzesinski, M. Seetha Lakshmi, and K. Mani Chandy. The MVA priority approximation. *ACM Transactions on Computer Systems*, 2(4):335–359, November 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).

Bryant:1984:MPA[BLS⁺21]

- Chaim Baskin, Natan Liss, Eli Schwartz, Evgenii Zheltonozhskii, Raja Giryes, Alex M. Bronstein, and Avi Mendelson. UNIQ: Uniform noise injection for non-uniform quantization of neural networks. *ACM Transactions on Computer Systems*, 37(1–4):4:1–4:15, March 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3444943>.

- [Blu83] **Blum:1983:HES**
Manuel Blum. How to exchange (secret) keys. *ACM Transactions on Computer Systems*, 1(2):175–193, May 1983. ISSN 0734-2071 (print), 1557-7333 (electronic). Previously published in ACM STOC '83 proceedings, pages 440–447.
- [BM00] **Brooks:2000:VBC**
David Brooks and Margaret Martonosi. Value-based clock gating and operation packing: dynamic strategies for improving processor power and performance. *ACM Transactions on Computer Systems*, 18(2):89–126, May 2000. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/2000-18-2/p89-brooks/>.
- [BMD⁺13] **Balakrishnan:2013:CDS**
Mahesh Balakrishnan, Dahlia Malkhi, John D. Davis, Vijayan Prabhakaran, Michael Wei, and Ted Wobber. CORFU: a distributed shared log. *ACM Transactions on Computer Systems*, 31(4):10:1–10:??, December 2013. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [BMK01] **Brown:2001:CBP**
Angela Demke Brown, Todd C. Mowry, and Orran Krieger. Compiler-based I/O prefetching for out-of-core applications. *ACM Transactions on Computer Systems*, 19(2):111–170, 2001. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/articles/journals/tocs/2001-19-2/p111-brown/p111-brown.pdf>; <http://www.acm.org/pubs/citations/journals/tocs/2001-19-2/p111-brown/>.
- [BMK07] **Behar:2007:TCS**
Michael Behar, Avi Mendelson, and Avinoam Kolodny. Trace cache sampling filter. *ACM Transactions on Computer Systems*, 25(1):3:1–3:??, February 2007. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [BMNW04] **Bartal:2004:FNF**
Yair Bartal, Alain Mayer, Kobbi Nissim, and Avishai Wool. *Firmato*: a novel firewall management toolkit. *ACM Transactions on Computer Systems*, 22(4):381–420, November 2004. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [BMVS15] **Blem:2015:IWU**
Emily Blem, Jaikrishnan Menon, Thiruvengadam Vijayaraghavan, and Karthikeyan Sankaralingam. ISA wars: Understanding the relevance of ISA being RISC or CISC to performance, power, and energy on modern architectures. *ACM Transactions on Computer Systems*, 33(1):3:1–3:??, March

2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Birrell:1984:IRP

- [BN84] Andrew D. Birrell and Bruce Jay Nelson. Implementing remote procedure calls. *ACM Transactions on Computer Systems*, 2(1):39–59, February 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).

Baumann:2015:SAU

- [BPH15] Andrew Baumann, Marcus Peinado, and Galen Hunt. Shielding applications from an untrusted cloud with Haven. *ACM Transactions on Computer Systems*, 33(3):8:1–8:??, September 2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Belay:2017:CIO

- [BPP⁺17a] Adam Belay, George Prekas, Mia Primorac, Ana Klimovic, Samuel Grossman, Christos Kozyrakis, and Edouard Bugnion. Corrigendum to “The IX Operating System: Combining Low Latency, High Throughput and Efficiency in a Protected Dataplane”. *ACM Transactions on Computer Systems*, 35(3):10:1, December 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). See [BPP⁺17b].

Belay:2017:IOS

- [BPP⁺17b] Adam Belay, George Prekas, Mia Primorac, Ana Klimovic,

Samuel Grossman, Christos Kozyrakis, and Edouard Bugnion. The IX operating system: Combining low latency, high throughput, and efficiency in a protected dataplane. *ACM Transactions on Computer Systems*, 34(4):11:1–11:??, January 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). See correction [BPP⁺17a].

Bihari:1991:DAR

- [BS91] Thomas E. Bihari and Karsten Schwan. Dynamic adaptation of real-time software. *ACM Transactions on Computer Systems*, 9(2):143–174, May 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-2/p143-bihari/>.

Bressoud:1996:HBF

- [BS96] Thomas C. Bressoud and Fred B. Schneider. Hypervisor-based fault tolerance. *ACM Transactions on Computer Systems*, 14(1):80–107, February 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1996-14-1/p80-bressoud/>.

Berkovich:1984:CCT

- [BW84] Simon Y. Berkovich and Colleen Roe Wilson. A com-

- puter communication technique using content-induced transaction overlap. *ACM Transactions on Computer Systems*, 2(1):60–77, February 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [BWD⁺15] **Bila:2015:EOP**
Nilton Bila, Eric J. Wright, Eyal De Lara, Kaustubh Joshi, H. Andrés Lagar-Cavilla, Eunbyung Park, Ashvin Goel, Matti Hiltunen, and Mahadev Satyanarayanan. Energy-oriented partial desktop virtual machine migration. *ACM Transactions on Computer Systems*, 33(1):2:1–2:??, March 2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [BYFK08] **Bar-Yossef:2008:RRW**
Ziv Bar-Yossef, Roy Friedman, and Gabriel Kliot. RaWMS — Random Walk Based Lightweight Membership Service for wireless ad hoc networks. *ACM Transactions on Computer Systems*, 26(2):5:1–5:??, June 2008. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [BZF10] **Blagodurov:2010:CAS**
Sergey Blagodurov, Sergey Zhuravlev, and Alexandra Fedorova. Contention-aware scheduling on multicore systems. *ACM Transactions on Computer Systems*, 28(4):8:1–8:??, December 2010. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [CASM08] **Colohan:2008:IPD**
Christopher B. Colohan, Anastasia Ailamaki, J. Gregory Steffan, and Todd C. Mowry. Incrementally parallelizing database transactions with thread-level speculation. *ACM Transactions on Computer Systems*, 26(1):2:1–2:??, February 2008. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [CBG⁺08] **Coulson:2008:GCM**
Geoff Coulson, Gordon Blair, Paul Grace, François Taiani, Ackbar Joolia, Kevin Lee, Jo Ueyama, and Thirunavukkarasu Sivaharan. A generic component model for building systems software. *ACM Transactions on Computer Systems*, 26(1):1:1–1:??, February 2008. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [CBZ95] **Carter:1995:TRC**
John B. Carter, John K. Bennett, and Willy Zwaenepoel. Techniques for reducing consistency-related communication in distributed shared-memory systems. *ACM Transactions on Computer Systems*, 13(3):205–243, August 1995. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org>:

- 80/pubs/citations/journals/10.1145/260519.260520
tocs/1995-13-3/p205-carter/10.1145/260519.260520
- [CCLP83] George W. Cox, William M. Corwin, Konrad K. Lai, and Fred J. Pollack. Interprocess communication, and processor dispatching on the Intel 432. *ACM Transactions on Computer Systems*, 1(1):45–66, February 1983. ISSN 0734-2071 (print), 1557-7333 (electronic). **Cox:1983:ICP**
- [CCC⁺08] Manuel Costa, Jon Crowcroft, Miguel Castro, Antony Rowstron, Lidong Zhou, Lintao Zhang, and Paul Barham. Vigilante: End-to-end containment of Internet worm epidemics. *ACM Transactions on Computer Systems*, 26(4):9:1–9:??, December 2008. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). **Costa:2008:VEE**
- [CCW⁺17] Haibo Chen, Rong Chen, Xingda Wei, Jiaxin Shi, Yanzhe Chen, Zhaoguo Wang, Binyu Zang, and Haibing Guan. Fast in-memory transaction processing using RDMA and HTM. *ACM Transactions on Computer Systems*, 35(1):3:1–3:??, July 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). **Chen:2017:FMT**
- [CCC⁺17] Byung-Gon Chun, Tyson Condie, Yingda Chen, Brian Cho, Andrew Chung, Carlo Curino, Chris Douglas, Matteo Interlandi, Beomyeol Jeon, Joo Seong Jeong, Gyewon Lee, Yunseong Lee, Tony Mastaglio, Dahlia Malkhi, Sergiy Matusevych, Brandon Myers, Mariia Mykhailova, Shraavan Narayanamurthy, Joseph Noor, Raghu Ramakrishnan, Sriram Rao, Russell Sears, Beysim Sezgin, Taegeon Um, Julia Wang, Markus Weimer, and Youngseok Yang. Apache REEF: Retainable evaluator execution framework. *ACM Transactions on Computer Systems*, 35(2):5:1–5:??, October 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). **Chun:2017:ARR**
- [CDD96] Flaviu Cristian, Bob Dancy, and Jon Dehn. Fault-tolerance in air traffic control systems. *ACM Transactions on Computer Systems*, 14(3):265–286, August 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL [http://www.acm.org:80/pubs/citations/journals/10.1145/260519.260520](http://www.acm.org/80/pubs/citations/journals/10.1145/260519.260520). **Cristian:1996:FTA**
- [CDE⁺13] James C. Corbett, Jeffrey Dean, Michael Epstein, Andrew Fikes, Christopher Frost,

- J. J. Furman, Sanjay Ghemawat, Andrey Gubarev, Christopher Heiser, Peter Hochschild, Wilson Hsieh, Sebastian Kanthak, Eugene Kogan, Hongyi Li, Alexander Lloyd, Sergey Melnik, David Mwaura, David Nagle, Sean Quinlan, Rajesh Rao, Lindsay Rolig, Yasushi Saito, Michal Szymaniak, Christopher Taylor, Ruth Wang, and Dale Woodford. Spanner: Google's globally distributed database. *ACM Transactions on Computer Systems*, 31(3):8:1–8:??, August 2013. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [CDY+17]
- Cherupalli:2017:DAS**
- Hari Cherupalli, Henry Duwe, Weidong Ye, Rakesh Kumar, and John Sartori. Determining application-specific peak power and energy requirements for ultra-low-power processors. *ACM Transactions on Computer Systems*, 35(3):9:1–9:33, December 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Clark:1985:PVT**
- Douglas W. Clark and Joel S. Emer. Performance of the VAX-11/780 translation buffer: Simulation and measurement. *ACM Transactions on Computer Systems*, 3(1):31–62, February 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-1/p31-clark/>. [CE85]
- Chang:2008:BDS**
- [CDG+08] Fay Chang, Jeffrey Dean, Sanjay Ghemawat, Wilson C. Hsieh, Deborah A. Wallach, Mike Burrows, Tushar Chandra, Andrew Fikes, and Robert E. Gruber. Bigtable: a distributed storage system for structured data. *ACM Transactions on Computer Systems*, 26(2):4:1–4:??, June 2008. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Coarfa:2006:PAT**
- [CDW06] Cristian Coarfa, Peter Druschel, and Dan S. Wallach. Performance analysis of TLS Web servers. *ACM Transactions on Computer Systems*, 24(1):39–69, February 2006. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [CEC+96]
- Chen:1996:MPP**
- J. Bradley Chen, Yasuhiro Endo, Kee Chan, David Mazières, Antonio Dias, Margo Seltzer, and Michael D. Smith. The measured performance of personal computer operating systems. *ACM Transactions on Computer Systems*, 14(1):3–40, February 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org>:

- 80/pubs/citations/journals/|
tocs/1996-14-1/p3-chen/.
- [CF96] Peter F. Corbett and Dror G. Feitelson. The Vesta parallel file system. *ACM Transactions on Computer Systems*, 14(3): 225–264, August 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/|tocs/1996-14-3/p225-corbett/|>.
- [CGJ88] Robert P. Colwell, Edward F. Gehringer, and E. Douglas Jensen. Performance effects of architectural complexity in the Intel 432. *ACM Transactions on Computer Systems*, 6(3): 296–339, August 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/|tocs/1986-4-2/p110-carriero/|>.
- [CFKL96] Pei Cao, Edward W. Felten, Anna R. Karlin, and Kai Li. Implementation and performance of integrated application-controlled file caching, prefetching, and disk scheduling. *ACM Transactions on Computer Systems*, 14(4):311–343, November 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/|tocs/1996-14-4/p311-cao/|>.
- [CG86] Nicholas Carriero and David Gelernter. The S/Net’s Linda kernel. *ACM Transactions on Computer Systems*, 4(2): 110–129, May 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/|tocs/1986-4-2/p110-carriero/|>.
- [CGL85] Ching-Hua Chow, Mohamed G. Gouda, and Simon S. Lam. A discipline for constructing multiphase communication protocols. *ACM Transactions on Computer Systems*, 3(4):315–343, November 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/|tocs/1985-3-4/p315-chow/|>.
- [Che87] David R. Cheriton. UIO: a Uniform I/O system interface for distributed systems. *ACM Transactions on Computer Systems*, 5(1):12–46, February 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/|tocs/1987-1-1/p12-cheriton/|>.

- tocs/1987-5-1/p12-cheriton/
- [Che10] Peter M. Chen. Editorial. *ACM Transactions on Computer Systems*, 28(1):1:1–1:??, March 2010. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [CHM83] K. Mani Chandy, Laura M. Haas, and Jayadev Misra. Distributed deadlock detection. *ACM Transactions on Computer Systems*, 1(2):144–156, May 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [CJ10] Alex King Yeung Cheung and Hans-Arno Jacobsen. Load balancing content-based publish/subscribe systems. *ACM Transactions on Computer Systems*, 28(4):9:1–9:??, December 2010. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [CKC12] Vitaly Chipounov, Volodymyr Kuznetsov, and George Candea. The S2E platform: Design, implementation, and applications. *ACM Transactions on Computer Systems*, 30(1):2:1–2:??, February 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [CKP+04] Seungryul Choi, Nicholas Kohout, Sumit Pamnani, Dongkeun Kim, and Donald Yeung. A general framework for prefetch scheduling in linked data structures and its application to multi-chain prefetching. *ACM Transactions on Computer Systems*, 22(2):214–280, May 2004. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [CKZ+15] Austin T. Clements, M. Frans Kaashoek, Nickolai Zeldovich, Robert T. Morris, and Eddie Kohler. The scalable commutativity rule: Designing scalable software for multicore processors. *ACM Transactions on Computer Systems*, 32(4):10:1–10:??, January 2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [CL85] K. Mani Chandy and Leslie Lamport. Distributed snapshots: Determining global states of distributed systems. *ACM Transactions on Computer Systems*, 3(1):63–75, February 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-1/p63-chandy/>.

- Castro:2002:PBF**
- [CL02] Miguel Castro and Barbara Liskov. Practical Byzantine fault tolerance and proactive recovery. *ACM Transactions on Computer Systems*, 20(4):398–461, November 2002. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Clark:1983:CPV**
- [Cla83] Douglas W. Clark. Cache performance in the VAX-11/780. *ACM Transactions on Computer Systems*, 1(1):24–37, February 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Chen:2019:ISA**
- [CLD⁺19] Yunji Chen, Huiying Lan, Zidong Du, Shaoli Liu, Jinhua Tao, Dong Han, Tao Luo, Qi Guo, Ling Li, Yuan Xie, and Tianshi Chen. An instruction set architecture for machine learning. *ACM Transactions on Computer Systems*, 36(3):9:1–9:??, August 2019. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3331469.
- Chase:1994:SPS**
- [CLFL94] Jeffrey S. Chase, Henry M. Levy, Michael J. Feeley, and Edward D. Lazowska. Sharing and protection in a single-address-space operating system. *ACM Transactions on Computer Systems*, 12(4):271–307, November 1994. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1994-12-4/p271-chase/>.
- Cao:1994:TPR**
- [CLVW94] Pei Cao, Swee Boon Lin, Shivakumar Venkataraman, and John Wilkes. The Ticker-TAIP parallel RAID architecture. *ACM Transactions on Computer Systems*, 12(3):236–269, August 1994. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1994-12-3/p236-cao/>.
- Chang:1984:RBP**
- [CM84] Jo-Mei Chang and N. F. Maxemchuk. Reliable broadcast protocols. *ACM Transactions on Computer Systems*, 2(3):251–273, August 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Carey:1986:PMC**
- [CM86] Michael J. Carey and Waleed A. Muhanna. The performance of multiversion concurrency control algorithms. *ACM Transactions on Computer Systems*, 4(4):338–378, November 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-4/p338-carey/>.

- Chang:1988:SAP**
- [CM88] Albert Chang and Mark F. Mergen. 801 storage: Architecture and programming. *ACM Transactions on Computer Systems*, 6(1):28–50, February 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-1/p28-chang/>. [CP94]
- Cheriton:1989:DGN**
- [CM89] David R. Cheriton and Timothy P. Mann. Decentralizing a global naming service for improved performance and fault tolerance. *ACM Transactions on Computer Systems*, 7(2):147–183, May 1989. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-2/p147-cheriton/>. [CRL03]
- Cherkasova:2009:AAD**
- [COM+09] Ludmila Cherkasova, Kivanc Ozonat, Ningfang Mi, Julie Symons, and Evgenia Smirni. Automated anomaly detection and performance modeling of enterprise applications. *ACM Transactions on Computer Systems*, 27(3):6:1–6:32, November 2009. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [CRW01]
- Comer:1986:CBM**
- [CP86] Douglas E. Comer and Larry L. Peterson. Conversation-based mail. *ACM Transactions on Computer Systems*, 4(4):299–319, November 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-4/p299-comer/>.
- Chen:1994:NAP**
- Peter M. Chen and David A. Patterson. A new approach to I/O performance evaluation: Self-scaling I/O benchmarks, predicted I/O performance. *ACM Transactions on Computer Systems*, 12(4):308–339, November 1994. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1994-12-4/p308-chen/>.
- Castro:2003:BUA**
- Miguel Castro, Rodrigo Rodrigues, and Barbara Liskov. BASE: Using abstraction to improve fault tolerance. *ACM Transactions on Computer Systems*, 21(3):236–269, August 2003. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Carzaniga:2001:DEW**
- Antonio Carzaniga, David S. Rosenblum, and Alexander L. Wolf. Design and evaluation of a wide-area event notification service. *ACM Transactions on Computer Systems*, 19(3):

- 332–383, 2001. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/2001-19-3/p332-carzaniga/>. [CY09]
- Cappello:1983:VLP**
- [CS83] Peter R. Cappello and Kenneth Steiglitz. A VLSI layout for a pipelined Dadda multiplier. *ACM Transactions on Computer Systems*, 1(2):157–174, May 1983. ISSN 0734-2071 (print), 1557-7333 (electronic). Reprinted in E. E. Swartzlander, *Computer Arithmetic*, Vol. 2, IEEE Computer Society Press Tutorial, Los Alamitos, CA, 1990.
- Collins:2001:RIC**
- [CT01] Jamison D. Collins and Dean M. Tullsen. Runtime identification of cache conflict misses: The adaptive miss buffer. *ACM Transactions on Computer Systems*, 19(4):413–439, November 2001. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Canakci:2021:SMB**
- [CV21] Burcu Canakci and Robbert Van Renesse. Scaling membership of Byzantine consensus. *ACM Transactions on Computer Systems*, 38(3–4):6:1–6:31, November 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3473138>. [CZW⁺21]
- Choi:2009:HCS**
- Seungryul Choi and Donald Yeung. Hill-climbing SMT processor resource distribution. *ACM Transactions on Computer Systems*, 27(1):1:1–1:??, February 2009. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Cheriton:1985:DPG**
- [CZ85] David R. Cheriton and Willy Zwaenepoel. Distributed process groups in the V kernel. *ACM Transactions on Computer Systems*, 3(2):77–107, May 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-2/p77-cheriton/>.
- Chen:2015:SFA**
- [CZL⁺15] Tianshi Chen, Shijin Zhang, Shaoli Liu, Zidong Du, Tao Luo, Yuan Gao, Junjie Liu, Dongsheng Wang, Chengyong Wu, Ninghui Sun, Yunji Chen, and Olivier Temam. A small-footprint accelerator for large-scale neural networks. *ACM Transactions on Computer Systems*, 33(2):6:1–6:??, June 2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Chen:2021:UHM**
- Lei Chen, Jiacheng Zhao, Chenxi Wang, Ting Cao, John Zigman, Haris Volos, Onur

- Mutlu, Fang Lv, Xiaobing Feng, Guoqing Harry Xu, and Huimin Cui. Unified holistic memory management supporting multiple big data processing frameworks over hybrid memories. *ACM Transactions on Computer Systems*, 39(1–4):2:1–2:??, November 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3511211>. [DC90]
- Dall:2012:DIE**
- [DAH⁺12] Christoffer Dall, Jeremy Andrus, Alexander Van’t Hof, Oren Laadan, and Jason Nieh. The design, implementation, and evaluation of cells: a virtual Smartphone architecture. *ACM Transactions on Computer Systems*, 30(3):9:1–9:??, August 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [DC22]
- deBruijn:2011:ATS**
- [dBBB11] Willem de Bruijn, Herbert Bos, and Henri Bal. Application-tailored I/O with Streamline. *ACM Transactions on Computer Systems*, 29(2):6:1–6:??, May 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- DeMori:1985:RAB**
- [DC85] Renato De Mori and Régis Cardin. A recursive algorithm for binary multiplication and its implementation. *ACM Transactions on Computer Systems*, 3(4):294–314, November 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-4/p294-de_mori/.
- Deering:1990:MRD**
- Stephen E. Deering and David R. Cheriton. Multicast routing in datagram internetworks and extended LANs. *ACM Transactions on Computer Systems*, 8(2):85–110, May 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-2/p85-deering/>.
- Diavastos:2022:EIS**
- Andreas Diavastos and Trevor E. Carlson. Efficient instruction scheduling using real-time load delay tracking. *ACM Transactions on Computer Systems*, 40(1–4):1:1–1:??, November 2022. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3548681>.
- Derk:1998:RFT**
- [DD98] M. D. Derk and L. S. DeBrunner. Reconfiguration for fault tolerance using graph grammars. *ACM Transactions on Computer Systems*, 16(1):41–54, February 1998. CODEN

- ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1998-16-1/p41-derk/>.
- [DK13] **Delimitrou:2013:QAS** [DRG17] Christina Delimitrou and Christos Kozyrakis. QoS-aware scheduling in heterogeneous datacenters with Paragon. *ACM Transactions on Computer Systems*, 31(4):12:1–12:??, December 2013. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [DKM96] **Devarakonda:1996:RCF** [DTM95] Murthy Devarakonda, Bill Kish, and Ajay Mohindra. Recovery in the Calypso file system. *ACM Transactions on Computer Systems*, 14(3):287–310, August 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1996-14-3/p287-devarakonda/>.
- [DR99] **Diniz:1999:ESO** [EBS⁺12] Pedro C. Diniz and Martin C. Rinard. Eliminating synchronization overhead in automatically parallelized programs using dynamic feedback. *ACM Transactions on Computer Systems*, 17(2):89–132, May 1999. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1999-17-2/p89-diniz/>.
- Diegues:2017:SPS** Nuno Diegues, Paolo Romano, and Stoyan Garbatov. Seer: Probabilistic scheduling for hardware transactional memory. *ACM Transactions on Computer Systems*, 35(3):7:1–7:41, December 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Diwan:1995:MSP** Amer Diwan, David Tarditi, and Eliot Moss. Memory system performance of programs with intensive heap allocation. *ACM Transactions on Computer Systems*, 13(3):244–273, August 1995. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1995-13-3/p244-diwan/>.
- Esmaeilzadeh:2012:PLD** Hadi Esmaeilzadeh, Emily Blem, Renée St. Amant, Karthikeyan Sankaralingam, and Doug Burger. Power limitations and dark silicon challenge the future of multi-core. *ACM Transactions on Computer Systems*, 30(3):11:1–11:??, August 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

- [EEKS09] **Eyerman:2009:MPM**
 Stijn Eyerman, Lieven Eeckhout, Tejas Karkhanis, and James E. Smith. A mechanistic performance model for superscalar out-of-order processors. *ACM Transactions on Computer Systems*, 27(2):3:1–3:??, May 2009. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [EG85] **Even:1985:PCC**
 S. Even and O. Goldreich. On the power of cascade ciphers. *ACM Transactions on Computer Systems*, 3(2):108–116, May 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-2/p108-even/>.
- [EGH⁺03] **Eugster:2003:LPB**
 P. Th. Eugster, R. Guerraoui, S. B. Handurukande, P. Kouznetsov, and A.-M. Kermarrec. Lightweight probabilistic broadcast. *ACM Transactions on Computer Systems*, 21(4):341–374, November 2003. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [EGH⁺14] **Enck:2014:TIF**
 William Enck, Peter Gilbert, Seungyeop Han, Vasant Tendulkar, Byung-Gon Chun, Landon P. Cox, Jaeyeon Jung, Patrick McDaniel, and Anmol N. Sheth. TaintDroid: an information-flow tracking system for realtime privacy monitoring on Smartphones. *ACM Transactions on Computer Systems*, 32(2):5:1–5:??, June 2014. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [EJ93] **Eager:1993:CER**
 Derek L. Eager and John Jahorjan. Chores: Enhanced run-time support for shared-memory parallel computing. *ACM Transactions on Computer Systems*, 11(1):1–32, February 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-1/p1-eager/>.
- [Ell03] **Ellis:2003:E**
 Carla Schlatter Ellis. Editorial. *ACM Transactions on Computer Systems*, 21(3):235, August 2003. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Ell05] **Ellis:2005:E**
 Carla Schlatter Ellis. Editorial. *ACM Transactions on Computer Systems*, 23(1):1, February 2005. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [ELMP12] **Ebrahimi:2012:FST**
 Eiman Ebrahimi, Chang Joo Lee, Onur Mutlu, and Yale N.

- Patt. Fairness via source throttling: a configurable and high-performance fairness substrate for multicore memory systems. *ACM Transactions on Computer Systems*, 30(2):7:1–7:??, April 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [EV03]
- Epema:1998:DUS**
- [Epe98] D. H. J. Epema. Decay-usage scheduling in multiprocessors. *ACM Transactions on Computer Systems*, 16(4):367–415, November 1998. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1998-16-4/p367-epema/>.
- Erlingsson:2012:FED**
- [EPP⁺12] Úlfar Erlingsson, Marcus Peinado, Simon Peter, Mihai Budiu, and Gloria Mainar-Ruiz. Fay: Extensible distributed tracing from kernels to clusters. *ACM Transactions on Computer Systems*, 30(4):13:1–13:??, November 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Fal87]
- Eager:1983:PBH**
- [ES83] Derek L. Eager and Kenneth C. Sevcik. Performance bound hierarchies for queueing networks. *ACM Transactions on Computer Systems*, 1(2):99–115, May 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Estan:2003:NDT**
- Cristian Estan and George Varghese. New directions in traffic measurement and accounting: Focusing on the elephants, ignoring the mice. *ACM Transactions on Computer Systems*, 21(3):270–313, August 2003. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Ferdman:2012:QMB**
- Michael Ferdman, Almutaz Adileh, Onur Kocberber, Stavros Volos, Mohammad Alisafae, Djordje Jevdjic, Cansu Kaynak, Adrian Daniel Popescu, Anastasia Ailamaki, and Babak Falsafi. Quantifying the mismatch between emerging scale-out applications and modern processors. *ACM Transactions on Computer Systems*, 30(4):15:1–15:??, November 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Falcone:1987:PIL**
- Joseph R. Falcone. A programmable interface language for heterogeneous distributed systems. *ACM Transactions on Computer Systems*, 5(4):330–351, November 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-4/p330-falcone/>.

- [FH07] **Fraser:2007:CPL** Keir Fraser and Tim Harris. Concurrent programming without locks. *ACM Transactions on Computer Systems*, 25(2): 5:1–5:??, May 2007. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [FKA10] **Friedman:2010:PQS** Roy Friedman, Gabriel Kliot, and Chen Avin. Probabilistic quorum systems in wireless Ad Hoc networks. *ACM Transactions on Computer Systems*, 28(3):7:1–7:??, September 2010. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [FKM02] **Fu:2002:FSD** Kevin Fu, M. Frans Kaashoek, and David Mazières. Fast and secure distributed read-only file system. *ACM Transactions on Computer Systems*, 20(1):1–24, February 2002. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [FLS01] **Fekete:2001:SUP** Alan Fekete, Nancy Lynch, and Alex Shvartsman. Specifying and using a partitionable group communication service. *ACM Transactions on Computer Systems*, 19(2):171–216, 2001. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/articles/journals/tocs/2001-19-2/p171-fekete/p171-fekete.pdf>; <http://www.acm.org/pubs/citations/journals/tocs/2001-19-2/p171-fekete/>.
- [FR86] **Fitzgerald:1986:IVM** Robert Fitzgerald and Richard F. Rashid. The integration of virtual memory management and interprocess communication in Accent. *ACM Transactions on Computer Systems*, 4(2): 147–177, May 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-2/p147-fitzgerald/>.
- [FS04] **Flinn:2004:MBL** Jason Flinn and M. Satyanarayanan. Managing battery lifetime with energy-aware adaptation. *ACM Transactions on Computer Systems*, 22(2):137–179, May 2004. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [GB01] **Grimm:2001:SAC** Robert Grimm and Brian N. Bershad. Separating access control policy, enforcement, and functionality in extensible systems. *ACM Transactions on Computer Systems*, 19(1):36–70, 2001. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/articles/journals/tocs/2001-19-1/p36-grimm/>.

- 19-1/p36-grimm/p36-grimm.pdf; <http://www.acm.org/pubs/citations/journals/tocs/2001-19-1/p36-grimm/>.
- [GD87] Robert Geist and Stephen Daniel. A continuum of disk scheduling algorithms. *ACM Transactions on Computer Systems*, 5(1):77–92, February 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-1/p77-geist/>.
- [GF93] Robert Geist and Stephen Daniel. A continuum of disk scheduling algorithms. *ACM Transactions on Computer Systems*, 5(1):77–92, February 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-1/p77-geist/>.
- [GDL⁺04] Robert Grimm, Janet Davis, Eric Lemar, Adam Macbeth, Steven Swanson, Thomas Anderson, Brian Bershad, Gaetano Borriello, Steven Gribble, and David Wetherall. System support for pervasive applications. *ACM Transactions on Computer Systems*, 22(4):421–486, November 2004. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [GEG⁺02] Gregory R. Ganger, Dawson R. Engler, M. Frans Kaashoek, Héctor M. Briceño, Russell Hunt, and Thomas Pinckney. Fast and flexible application-level networking on exokernel systems. *ACM Transactions on Computer Systems*, 20(1):49–83, February 2002. CO-
- DEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Gopalakrishnan:1993:DVR**
- Ganesh Gopalakrishnan and Richard Fujimoto. Design and verification of the Roll-back Chip using HOP: a case study of formal methods applied to hardware design. *ACM Transactions on Computer Systems*, 11(2):109–145, May 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-2/p109-gopalakrishnan/>.
- Gupta:1989:HSI**
- Anoop Gupta, Charles Forgy, and Allen Newell. High-speed implementations of rule-based systems. *ACM Transactions on Computer Systems*, 7(2):119–146, May 1989. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-2/p119-gupta/>.
- Gifford:1988:RPP**
- David K. Gifford and Nathan Glasser. Remote pipes and procedures for efficient distributed communication. *ACM Transactions on Computer Systems*, 6(3):258–283, August 1988. CODEN ACSYEC. ISSN 0734-2071
- Geist:1987:CDS**
- Grimm:2004:SSP**
- Ganger:2002:FFA**

- (print), 1557-7333 (electronic).
 URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-3/p258-gifford/>
- [GGL⁺19] **Guerraoui:2019:LU**
 Rachid Guerraoui, Hugo Guiroux, Renaud Lachaize, Vivien Quéma, and Vasileios Trigonakis. Lock-unlock: Is that all? A pragmatic analysis of locking in software systems. *ACM Transactions on Computer Systems*, 36(1):1:1–1:??, March 2019. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3301501.
- [GJT⁺12] **Gebhart:2012:HTS**
 Mark Gebhart, Daniel R. Johnson, David Tarjan, Stephen W. Keckler, William J. Dally, Erik Lindholm, and Kevin Skadron. A hierarchical thread scheduler and register file for energy-efficient throughput processors. *ACM Transactions on Computer Systems*, 30(2):8:1–8:??, April 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [GKXX13] **Gandhi:2012:ADR**
 Anshul Gandhi, Mor Harchol-Balter, Ram Raghunathan, and Michael A. Kozuch. AutoScale: Dynamic, robust capacity management for multi-tier data centers. *ACM Transactions on Computer Systems*, 30(4):14:1–14:??, November 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [GKXX13] **Gamage:2013:PRO**
 Sahan Gamage, Ramana Rao Kompella, Dongyan Xu, and Ardalan Kangarlou. Protocol responsibility offloading to improve TCP throughput in virtualized environments. *ACM Transactions on Computer Systems*, 31(3):7:1–7:??, August 2013. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [GHPR88] **Gross:1988:MEM**
 Thomas R. Gross, John L. Hennessy, Steven A. Przybylski, and Christopher Rowen. Measurement and evaluation of the MIPS architecture and processor. *ACM Transactions on Computer Systems*, 6(3):229–257, August 1988. CODEN ACSYEC. ISSN 0734-2071
- [GLL14] **Guevara:2014:MMM**
 Marisabel Guevara, Benjamin Lubin, and Benjamin C. Lee. Market mechanisms for managing datacenters with heterogeneous microarchitectures. *ACM Transactions on Computer Systems*, 32(1):3:1–3:??, February 2014. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Greenberg:1991:AUP

- [GLM91] Albert G. Greenberg, Boris D. Lubachevsky, and Isi Mitrani. Algorithms for unboundedly parallel simulations. *ACM Transactions on Computer Systems*, 9(3):201–221, August 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-3/p201-greenberg/>.

Guerraoui:2010:TOT

- [GLPQ10] Rachid Guerraoui, Ron R. Levy, Bastian Pochon, and Vivien Quéma. Throughput optimal total order broadcast for cluster environments. *ACM Transactions on Computer Systems*, 28(2):5:1–5:??, July 2010. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Glasgow:1987:DPF

- [GM87] Janice I. Glasgow and Glenn H. MacEwen. The development and proof of a formal specification for a multilevel secure system. *ACM Transactions on Computer Systems*, 5(2):151–184, May 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-2/p151-glasgow/>.

Gabbay:1998:UVP

- [GM98] Freddy Gabbay and Avi Mendelson. Using value prediction to increase the power of speculative execution hardware. *ACM Transactions on Computer Systems*, 16(3):234–270, August 1998. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1998-16-3/p234-gabbay/>.

Glasgow:1992:LRA

- [GMP92] Janice Glasgow, Glenn MacEwen, and Prakash Panangaden. A logic for reasoning about security. *ACM Transactions on Computer Systems*, 10(3):226–264, August 1992. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-3/p226-glasgow/>.

Garcia-Molina:1991:ORM

- [GMS91] Héctor García-Molina and Annemarie Spauster. Ordered and reliable multicast communication. *ACM Transactions on Computer Systems*, 9(3):242–271, August 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-3/p242-garcia-molina/>.

- [GMSP00] **Ganger:2000:SUS** Gregory R. Ganger, Marshall Kirk McKusick, Craig A. N. Soules, and Yale N. Patt. Soft updates: a solution to the metadata update problem in file systems. *ACM Transactions on Computer Systems*, 18(2):127–153, May 2000. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/2000-18-2/p127-ganger/>.
- [GO05] **Gluhovsky:2005:CMC** Ilya Gluhovsky and Brian O’Krafka. Comprehensive multiprocessor cache miss rate generation using multivariate models. *ACM Transactions on Computer Systems*, 23(2):111–145, May 2005. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [GS93] **Gheith:1993:CKS** Ahmed Gheith and Karsten Schwan. CHAOS^{arc}: Kernel support for multiweight objects, invocations, and atomicity in real-time multiprocessor applications. *ACM Transactions on Computer Systems*, 11(1):33–72, February 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-1/p33-gheith/>.
- [GS00] **Gontmakher:2000:JCN** Alex Gontmakher and Asaf Schuster. Java consistency: nonoperational characterizations for Java memory behavior. *ACM Transactions on Computer Systems*, 18(4):333–386, 2000. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/articles/journals/tocs/2000-18-4/p333-gontmakher/p333-gontmakher.pdf>; <http://www.acm.org/pubs/citations/journals/tocs/2000-18-4/p333-gontmakher/>.
- [GTHR00] **Govil:2000:CDR** Kingshuk Govil, Dan Teodosiu, Yongqiang Huang, and Mendel Rosenblum. Cellular disco: resource management using virtual clusters on shared-memory multiprocessors. *ACM Transactions on Computer Systems*, 18(3):229–262, 2000. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/2000-18-3/p229-govil/>.
- [GvB90] **Gotzhein:1990:DPS** Reinhard Gotzhein and Gregor von Bochmann. Deriving protocol specifications from service specifications including parameters. *ACM Transactions on Computer Systems*, 8(4):255–283, November 1990. CODEN ACSYEC. ISSN 0734-2071

- (print), 1557-7333 (electronic).
 URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-4/p255-gotzhein/>
- [GVM⁺11] Diwaker Gupta, Kashi Venkatesh Vishwanath, Marvin McNett, Amin Vahdat, Ken Yocum, Alex Snoeren, and Geoffrey M. Voelker. DieCast: Testing distributed systems with an accurate scale model. *ACM Transactions on Computer Systems*, 29(2):4:1–4:??, May 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [GVO07] Ilya Gluhovsky, David Vengerov, and Brian O’Krafka. Comprehensive multivariate extrapolation modeling of multiprocessor cache miss rates. *ACM Transactions on Computer Systems*, 25(1):2:1–2:??, February 2007. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [GWS96] Andrew S. Grimshaw, Jon B. Weissman, and W. Timothy Strayer. Portable runtime support for dynamic object-oriented parallel processing. *ACM Transactions on Computer Systems*, 14(2):139–170, May 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [GWSU13] **Gupta:2011:DTD** Sriram Govindan, Di Wang, Anand Sivasubramaniam, and Bhuvan Uргаonkar. Aggressive datacenter power provisioning with batteries. *ACM Transactions on Computer Systems*, 31(1):2:1–2:??, February 2013. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [GY90] **Goldszmidt:1990:HLL** German S. Goldszmidt and Shaula Yemini. High-level language debugging for concurrent programs. *ACM Transactions on Computer Systems*, 8(4):311–336, November 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-4/p311-goldszmidt/>
- [HA06] **Holman:2006:LUP** Philip Holman and James H. Anderson. Locking under Pfair scheduling. *ACM Transactions on Computer Systems*, 24(2):140–174, May 2006. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Har87] **Harter:1987:RTL** Paul K. Harter, Jr. Response times in level-structured sys-

- tems. *ACM Transactions on Computer Systems*, 5(3):232–248, August 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-3/p232-harter/>.
- [HBAK86] K. P. Hoyme, S. C. Bruell, P. V. Afshari, and R. Y. Kain. A tree-structured mean value analysis algorithm. *ACM Transactions on Computer Systems*, 4(2):178–185, May 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-2/p178-hoyme/>.
- [HBD97] Mor Harchol-Balter and Allen B. Downey. Exploiting process lifetime distributions for dynamic load balancing. *ACM Transactions on Computer Systems*, 15(3):253–285, August 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-3/p253-harchol-balter/>.
- [HBSBA03] Mor Harchol-Balter, Bianca Schroeder, Nikhil Bansal, and Mukesh Agrawal. Size-based scheduling to improve Web performance. *ACM Transactions on Computer Systems*, 21(2):207–233, May 2003. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [HDV⁺12] Tyler Harter, Chris Dragger, Michael Vaughn, Andrea C. Arpaci-Dusseau, and Remzi H. Arpaci-Dusseau. A file is not a file: Understanding the I/O behavior of Apple desktop applications. *ACM Transactions on Computer Systems*, 30(3):10:1–10:??, August 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [HE16] Gernot Heiser and Kevin Elphinstone. L4 microkernels: The lessons from 20 years of research and deployment. *ACM Transactions on Computer Systems*, 34(1):1:1–1:29, April 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Her86] Maurice Herlihy. A quorum-consensus replication method for abstract data types. *ACM Transactions on Computer Systems*, 4(1):32–53, February 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/>

- tocs/1986-4-1/p32-herlihy/
- [Her87] Maurice Herlihy. Concurrency versus availability: Atomicity mechanisms for replicated data. *ACM Transactions on Computer Systems*, 5(3):249–274, August 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-3/p249-herlihy/>.
- [HKB95] Saied Hosseini-Khayat and Andreas D. Bovopoulos. A simple and efficient bus management scheme that supports continuous streams. *ACM Transactions on Computer Systems*, 13(2):122–140, May 1995. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1995-13-2/p122-hosseini-khayat/>.
- [HJK07] Lisa Higham, Lillanne Jackson, and Jalal Kawash. Specifying memory consistency of write buffer multiprocessors. *ACM Transactions on Computer Systems*, 25(1):1:1–1:??, February 2007. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [HKM⁺88] John H. Howard, Michael L. Kazar, Sherri G. Menees, David A. Nichols, M. Satyanarayanan, Robert N. Sidebotham, and Michael J. West. Scale and performance in a distributed file system. *ACM Transactions on Computer Systems*, 6(1):51–81, February 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-1/p51-howard/>.
- [HKM02] Zhigang Hu, Stefanos Kaxiras, and Margaret Martonosi. Let caches decay: reducing leakage energy via exploitation of cache generational behavior. *ACM Transactions on Computer Systems*, 20(2):161–190, May 2002. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [HKS⁺83] Tsutomu Hoshino, Toshio Kawai, Tomonori Shirakawa, Junichi Higashino, Akira Yamaoka, Hachidai Ito, Takashi Sato, and Kazuo Sawada. PACS: a parallel microprocessor array for scientific calculations. *ACM Transactions on Computer Systems*, 1(3):195–221, August 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).

- [HL91] **Huguet:1991:ASR**
 Miquel Huguet and Tomás Lang. Architectural support for reduced register saving/restoring in single-window register files. *ACM Transactions on Computer Systems*, 9(1):66–97, February 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-1/p66-huguet/>.
- [HL07] **Hur:2007:MSM**
 Ibrahim Hur and Calvin Lin. Memory scheduling for modern microprocessors. *ACM Transactions on Computer Systems*, 25(4):10:1–10:??, December 2007. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [HLMM05] **Herlihy:2005:NMM**
 Maurice Herlihy, Victor Luchangco, Paul Martin, and Mark Moir. Nonblocking memory management support for dynamic-sized data structures. *ACM Transactions on Computer Systems*, 23(2):146–196, May 2005. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [HLRW93] **Hill:1993:CSM**
 Mark D. Hill, James R. Larus, Steven K. Reinhardt, and David A. Wood. Cooperative shared memory: Software and hardware for scalable multiprocessors. *ACM Transactions on Computer Systems*, 11(4):300–318, November 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-4/p300-hill/>.
- [HLS95] **Herlihy:1995:SCC**
 Maurice Herlihy, Beng-Hong Lim, and Nir Shavit. Scalable concurrent counting. *ACM Transactions on Computer Systems*, 13(4):343–364, November 1995. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1995-13-4/p343-herlihy/>.
- [HLZ⁺16] **Hauswald:2016:DFW**
 Johann Hauswald, Michael A. Laurenzano, Yunqi Zhang, Hailong Yang, Yiping Kang, Cheng Li, Austin Rovinski, Arjun Khurana, Ronald G. Dreslinski, Trevor Mudge, Vinicius Petrucci, Lingjia Tang, and Jason Mars. Designing future warehouse-scale computers for Sirius, an end-to-end voice and vision personal assistant. *ACM Transactions on Computer Systems*, 34(1):2:1–2:??, April 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [HMMS98] **Horowitz:1998:IMO**
 Mark Horowitz, Margaret Martonoisi, Todd C. Mowry,

- and Michael D. Smith. Informing memory operations: Memory performance feedback mechanisms and their applications. *ACM Transactions on Computer Systems*, 16(2):170–205, May 1998. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1998-16-2/p170-horowitz/>.
- [HMSC88] **Haskin:1988:RMQ** [HP94] Roger Haskin, Yoni Malachi, Wayne Sawdon, and Gregory Chan. Recovery management in QuickSilver. *ACM Transactions on Computer Systems*, 6(1):82–108, February 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-1/p82-haskin/>.
- [HO95] **Hartman:1995:ZSN** [HS96] John H. Hartman and John K. Ousterhout. The Zebra striped network file system. *ACM Transactions on Computer Systems*, 13(3):274–310, August 1995. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1995-13-3/p274-hartman/>.
- [HP87] **Herzberg:1987:PPS** [HS03] Amir Herzberg and Shlomit S. Pinter. Public protection of software. *ACM Transactions on Computer Systems*, 5(4):371–393, November 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-4/p371-herzberg/>.
- Heidemann:1994:FSD**
- John S. Heidemann and Gerald J. Popek. File-system development with stackable layers. *ACM Transactions on Computer Systems*, 12(1):58–89, February 1994. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1994-12-1/p58-heidemann/>.
- Hardy:1996:CIE**
- Darren R. Hardy and Michael F. Schwartz. Customized information extraction as a basis for resource discovery. *ACM Transactions on Computer Systems*, 14(2):171–199, May 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1996-14-2/p171-hardy/>.
- Hadzic:2003:BPF**
- Ilija Hadžić and Jonathan M. Smith. Balancing performance

- and flexibility with hardware support for network architectures. *ACM Transactions on Computer Systems*, 21(4):375–411, November 2003. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [HSY05] Windsor W. Hsu, Alan Jay Smith, and Honesty C. Young. The automatic improvement of locality in storage systems. *ACM Transactions on Computer Systems*, 23(4):424–473, November 2005. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [HVP99] Adishesu Hari, George Varghese, and Guru Parulkar. An architecture for packet-striping protocols. *ACM Transactions on Computer Systems*, 17(4):249–287, November 1999. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/articles/journals/tocs/1999-17-4/p249-hari/p249-hari.pdf>; <http://www.acm.org/pubs/citations/journals/tocs/1999-17-4/p249-hari/>.
- [HY92] William Tsun-Yuk Hsu and Pen-Chung Yew. An effective synchronization network for hot-spot accesses. *ACM Transactions on Computer Systems*, 10(3):167–189, August 1992. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-3/p167-hsu/>.
- [HZL⁺17] Chang-Hong Hsu, Yunqi Zhang, Michael A. Laurenzano, David Meisner, Thomas Wenisch, Ronald G. Dreslinski, Jason Mars, and Lingjia Tang. Reining in long tails in warehouse-scale computers with quick voltage boosting using adrenaline. *ACM Transactions on Computer Systems*, 35(1):2:1–2:??, July 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [HZX⁺18] Tyler Hunt, Zhiting Zhu, Yuanzhong Xu, Simon Peter, and Emmett Witchel. Ryoan: a distributed sandbox for untrusted computation on secret data. *ACM Transactions on Computer Systems*, 35(4):13:1–

Hsu:2005:AIL

[HYC+03]

Hu:2003:RTS**Hari:1999:APS**[HVL⁺17]**Hsu:2017:RLT****Hsu:1992:ESN**[HZX⁺18]**Hunt:2018:RDS**

- 13:??, December 2018. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3231594.
- [IRH86] **Iyer:1986:MMC** R. K. Iyer, D. J. Rossetti, and M. C. Hsueh. Measurement and modeling of computer reliability as affected by system activity. *ACM Transactions on Computer Systems*, 4(3):214–237, August 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-3/p214-iyer/>.
- [JBG⁺19] **Iturbe:2019:ATC** Xabier Iturbe, Balaji Venu, Emre Ozer, Jean-Luc Poupat, Gregoire Gimenez, and Hans-Ulrich Zurek. The Arm Triple Core Lock-Step (TCLS) processor. *ACM Transactions on Computer Systems*, 36(3):7:1–7:??, August 2019. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3323917.
- [Jha20] **Joseph:1986:LCM** Thomas A. Joseph and Kenneth P. Birman. Low cost management of replicated data in fault-tolerant distributed systems. *ACM Transactions on Computer Systems*, 4(1):54–70, February 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-1/p54-joseph/>.
- [Jha20] **Jha:2019:DFS** Sagar Jha, Jonathan Behrens, Theo Gkountouvas, Matthew Milano, Weijia Song, Edward Tremel, Robbert Van Renesse, Sydney Zink, and Kenneth P. Birman. Derecho: Fast state machine replication for cloud services. *ACM Transactions on Computer Systems*, 36(2):4:1–4:??, April 2019. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3302258. See corrigendum [Jha20].
- [JEJ13] **Jayaram:2013:PCB** K. R. Jayaram, Patrick Eugster, and Chamikara Jayalath. Parametric content-based publish/subscribe. *ACM Transactions on Computer Systems*, 31(2):4:1–4:??, May 2013. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Jha20] **Jha:2020:CDF** Sagar Jha. Corrigendum to “Derecho: Fast State Machine Replication for Cloud Services,” by Jha et al., *ACM Transactions on Computer Systems (TOCS) Volume 36, Issue 2, Article No. 4. ACM Transactions on Computer Systems*, 36(4):15:1, June 2020. CO-

- DEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3395604>. See [JBG⁺19].
- [Jim05] Daniel A. Jiménez. Improved latency and accuracy for neural branch prediction. *ACM Transactions on Computer Systems*, 23(2):197–218, May 2005. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [JL02] Daniel A. Jiménez and Calvin Lin. Neural methods for dynamic branch prediction. *ACM Transactions on Computer Systems*, 20(4):369–397, November 2002. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [JLHB88] Eric Jul, Henry Levy, Norman Hutchinson, and Andrew Black. Fine-grained mobility in the Emerald system. *ACM Transactions on Computer Systems*, 6(1):109–133, February 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-1/p109-jul/>.
- [JLL⁺16] Sang-Woo Jun, Ming Liu, Sungjin Lee, Jamey Hicks, John Ankcorn, Myron King, Shuotao Xu, and Arvind. BlueDBM: Distributed flash storage for big data analytics. *ACM Transactions on Computer Systems*, 34(3):7:1–7:??, September 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [JLSU87] Jeffrey Joyce, Greg Lomow, Konrad Slind, and Brian Unger. Monitoring distributed systems. *ACM Transactions on Computer Systems*, 5(2):121–150, May 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-2/p121-joyce/>.
- [JMB05] Márk Jelasity, Alberto Montresor, and Ozalp Babaoglu. Gossip-based aggregation in large dynamic networks. *ACM Transactions on Computer Systems*, 23(3):219–252, August 2005. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Jon83a] Anita K. Jones. Editor’s introduction. *ACM Transactions on Computer Systems*, 1(1):1–2, February 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).

Jimenez:2005:ILA

Jimenez:2002:NMD

Jul:1988:FGM

Jun:2016:BDF

Joyce:1987:MDS

Jelasity:2005:GBA

Jones:1983:EI

- [Jon83b] Anita K. Jones. Preface to special issue. *ACM Transactions on Computer Systems*, 1(4):279–280, November 1983. ISSN 0734-2071 (print), 1557-7333 (electronic). **Jones:1983:PSI**
- [Jon84] Anita K. Jones. Preface to special issue. *ACM Transactions on Computer Systems*, 2(1):1, November 1984. ISSN 0734-2071 (print), 1557-7333 (electronic). **Jones:1984:PSI** [JVJ15]
- [Jon88] Anita K. Jones. Preface: Special issue on operating systems principles. *ACM Transactions on Computer Systems*, 6(1):1–2, February 1988. **Jones:1988:PSI** [JW98]
- [JT88] Dale M. Johnson and F. Javier Thayer. Stating security requirements with tolerable sets. *ACM Transactions on Computer Systems*, 6(3):284–295, August 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-3/p284-johnson/> **Johnson:1988:SSR** [KA24]
- [JVJ+07] Márk Jelasity, Spyros Voulgaris, Rachid Guerraoui, Anne-Marie Kermarrec, and Maarten van Steen. Gossip-based peer sampling. *ACM Transactions on Computer Systems*, 25(3):8:1–8:??, August 2007. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). **Johansen:2015:FSS**
- Håvard D. Johansen, Robbert Van Renesse, Ymir Vigfusson, and Dag Johansen. Fireflies: a secure and scalable membership and gossip service. *ACM Transactions on Computer Systems*, 33(2):5:1–5:??, June 2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). **Juurlink:1998:QCP**
- Ben H. H. Juurlink and Harry A. G. Wijshoff. A quantitative comparison of parallel computation models. *ACM Transactions on Computer Systems*, 16(3):271–318, August 1998. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1998-16-3/p271-juurlink/> **Kappes:2024:DFU**
- Giorgos Kappes and Stergios V. Anastasiadis. Diccio: Flexible user-level services for efficient multitenant isolation. *ACM Transactions on Computer Systems*, 42(1–2):3:1–3:??, May 2024. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

- (electronic). URL <https://dl.acm.org/doi/10.1145/3639404>.
- [KAD⁺09] Ramakrishna Kotla, Lorenzo Alvisi, Mike Dahlin, Allen Clement, and Edmund Wong. Zyzzyva: Speculative Byzantine fault tolerance. *ACM Transactions on Computer Systems*, 27(4):7:1–7:39, December 2009. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [KAE⁺14] Gerwin Klein, June Andronick, Kevin Elphinstone, Toby Murray, Thomas Sewell, Rafal Kolanski, and Gernot Heiser. Comprehensive formal verification of an OS microkernel. *ACM Transactions on Computer Systems*, 32(1):2:1–2:??, February 2014. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Kam84] Hisao Kameda. Optimality of a central processor scheduling policy for processing a job stream. *ACM Transactions on Computer Systems*, 2(1):78–90, February 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Kam86] Hisao Kameda. Effects of job loading policies for multi-programming systems in processing a job stream. *ACM Transactions on Computer Systems*, 4(1):71–106, February 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-1/p71-kameda/>.
- [KBK⁺21] Georgios P. Katsikas, Tom Barbette, Dejan Kostić, Gerald Q. Maguire, Jr., and Rebecca Steinert. Metron: High-performance NFV service chaining even in the presence of blackboxes. *ACM Transactions on Computer Systems*, 38(1–2):3:1–3:45, July 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3465628>.
- [KCR11] Changhoon Kim, Matthew Caesar, and Jennifer Rexford. SEATTLE: a Scalable Ethernet Architecture for Large Enterprises. *ACM Transactions on Computer Systems*, 29(1):1:1–1:35, February 2011. CODEN ACSYEC. ISSN 0734-

Kotla:2009:ZSB**Klein:2014:CFV****Kameda:1984:OCP****Kameda:1986:EJL****Katsikas:2021:MHP****King:2005:BI****Kim:2011:SSE**

- 2071 (print), 1557-7333 (electronic).
- [Kel00] Peter J. Keleher. A high-level abstraction of shared accesses. *ACM Transactions on Computer Systems*, 18(1):1–36, February 2000. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/2000-18-1/p1-keleher/>.
- [KH92] Peter J. Keleher and R. E. Kessler. Page placement algorithms for large real-indexed caches. *ACM Transactions on Computer Systems*, 10(4):338–359, November 1992. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-4/p338-kessler/>.
- [Kem83] Richard A. Kemmerer. Shared resource matrix methodology: An approach to identifying storage and timing channels. *ACM Transactions on Computer Systems*, 1(3):256–277, August 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Kin90] Richard P. King. Disk arm movement in anticipation of future requests. *ACM Transactions on Computer Systems*, 8(3):214–229, August 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-3/p214-king/>.
- [KG83] Hiroshi Kobayashi and Mario Gerla. Optimal routing in closed queueing networks. *ACM Transactions on Computer Systems*, 1(4):294–310, November 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [KG21] Rakesh Kumar and Boris Grot. Shooting down the server front-end bottleneck. *ACM Transactions on Computer Systems*, 38(3–4):7:1–7:30, November 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Kir87] W. Worth Kirkman. An optimized contention protocol for broadband networks. *ACM Transactions on Computer Systems*, 5(3):275–283, August 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-3/p275-kirkman/>.

- [KLS86] **Kronenberg:1986:VCC** Nancy P. Kronenberg, Henry M. Levy, and William D. Strecker. VAXclusters: a closely-coupled distributed system. *ACM Transactions on Computer Systems*, 4(2):130–146, May 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-2/p130-kronenberg/>.
- [Koc87] **Koch:1987:DFA** Philip D. L. Koch. Disk file allocation based on the buddy system. *ACM Transactions on Computer Systems*, 5(4):352–370, November 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-4/p352-koch/>.
- [KMC⁺00] **Kohler:2000:CMR** Eddie Kohler, Robert Morris, Benjie Chen, John Jan-notti, and M. Frans Kaashoek. The click modular router. *ACM Transactions on Computer Systems*, 18(3):263–297, 2000. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/2000-18-3/p263-kohler/>.
- [KMG16] **Kumar:2016:ASC** Rakesh Kumar, Alejandro Martínez, and Antonio González. Assisting static compiler vectorization with a speculative dynamic vectorizer in an HW/SW codesigned environment. *ACM Transactions on Computer Systems*, 33(4):12:1–12:??, January 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Kot97] **Kotz:1997:DDM** David Kotz. Disk-directed I/O for MIMD multiproces-sors. *ACM Transactions on Computer Systems*, 15(1):41–74, February 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-1/p41-kotz/>.
- [KP91] **Karn:1991:IRT** Phil Karn and Craig Partridge. Improving round-trip time estimates in reliable transport protocols. *ACM Transactions on Computer Systems*, 9(4):364–373, November 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-4/p364-karn/>.
- [KPHV11] **Kalibera:2011:SRT** Tomas Kalibera, Filip Pizlo, Antony L. Hosking, and Jan Vitek. Scheduling real-time garbage collection on unipro-cessors. *ACM Transactions*

on *Computer Systems*, 29(3): 8:1–8:??, August 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Kandlur:1991:RBA

[KS91]

Dilip D. Kandlur and Kang G. Shin. Reliable broadcast algorithms for HARTS. *ACM Transactions on Computer Systems*, 9(4):374–398, November 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-4/p374-kandlur/>.

[KSH⁺05]

URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-3/p286-krieger/>.

Kontothanassis:2005:SMC

Leonidas Kontothanassis, Robert Stets, Galen Hunt, Umit Rencuzogullari, Gautam Altekar, Sandhya Dwarkadas, and Michael L. Scott. Shared memory computing on clusters with symmetric multiprocessors and system area networks. *ACM Transactions on Computer Systems*, 23(3):301–335, August 2005. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Kistler:1992:DOC

[KS92]

James J. Kistler and M. Satyanarayanan. Disconnected operation in the Coda File System. *ACM Transactions on Computer Systems*, 10(1):3–25, February 1992. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-1/p3-kistler/>.

[KSMD02]

Keidar:2002:MGM

Idit Keidar, Jeremy Sussman, Keith Marzullo, and Danny Dolev. Moshe: a group membership service for WANs. *ACM Transactions on Computer Systems*, 20(3):191–238, August 2002. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Kostic:2008:HBD

Krieger:1997:HPO

[KS97]

Orran Krieger and Michael Stumm. HFS: a performance-oriented flexible file system based on building-block compositions. *ACM Transactions on Computer Systems*, 15(3): 286–321, August 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

[KSV⁺08]

Dejan Kostić, Alex C. Snoeren, Amin Vahdat, Ryan Braud, Charles Killian, James W. Anderson, Jeannie Albrecht, Adolfo Rodriguez, and Erik Vandekieft. High-bandwidth data dissemination for large-scale distributed systems. *ACM Transactions on Computer Systems*, 26(1):3:1–3:??, February 2008. CODEN ACSYEC. ISSN

0734-2071 (print), 1557-7333 (electronic).

Kaashoek:1993:FIP

- [KvRvST93] M. Frans Kaashoek, Robert van Renesse, Hans van Staveren, and Andrew S. Tanenbaum. FLIP: An internetwork protocol for supporting distributed systems. *ACM Transactions on Computer Systems*, 11(1):73–106, February 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-1/p73-kaashoek/> [LA93]

Keromytis:2006:COS

- [KWDB06] Angelos D. Keromytis, Jason L. Wright, Theo De Raadt, and Matthew Burnside. Cryptography as an operating system service: a case study. *ACM Transactions on Computer Systems*, 24(1):1–38, February 2006. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Kontothanassis:1997:SCS

- [KWS97] Leonidas I. Kontothanassis, Robert W. Wisniewski, and Michael L. Scott. Scheduler-conscious synchronization. *ACM Transactions on Computer Systems*, 15(1):3–40, February 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-1/p3-kontothanassis/>

80/pubs/citations/journals/tocs/1997-15-1/p3-kontothanassis/

Kim:2004:SSL

[KY04] Dongkeun Kim and Donald Yeung. A study of source-level compiler algorithms for automatic construction of pre-execution code. *ACM Transactions on Computer Systems*, 22(3):326–379, August 2004. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Lim:1993:WAS

Beng-Hong Lim and Anant Agarwal. Waiting algorithms for synchronization in large-scale multiprocessors. *ACM Transactions on Computer Systems*, 11(3):253–294, August 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-3/p253-lim/>

Lee:2013:ETB

[LAB⁺13] Yunsup Lee, Rimas Avizienis, Alex Bishara, Richard Xia, Derek Lockhart, Christopher Batten, and Krste Asanović. Exploring the tradeoffs between programmability and efficiency in data-parallel accelerators. *ACM Transactions on Computer Systems*, 31(3):6:1–6:??, August 2013. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

- [LABW92] **Lampson:1992:ADS**
 Butler Lampson, Martín Abadi, Michael Burrows, and Edward Wobber. Authentication in distributed systems: Theory and practice. *ACM Transactions on Computer Systems*, 10(4):265–310, November 1992. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-4/p265-lampson/> [LBM⁺21]
- [Lam87] **Lampport:1987:FME**
 Leslie Lamport. A fast mutual exclusion algorithm. *ACM Transactions on Computer Systems*, 5(1):1–11, February 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-1/p1-lampport/> [LCG⁺16]
- [Lam90] **Lampport:1990:CRW**
 Leslie Lamport. Concurrent reading and writing of clocks. *ACM Transactions on Computer Systems*, 8(4):305–310, November 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-4/p305-lampport/> [LCWB⁺11]
- [Lam98] **Lampport:1998:PTP**
 Leslie Lamport. The part-time parliament. *ACM Transactions on Computer Systems*, 16(2):133–169, May 1998. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1998-16-2/p133-lampport/>
- [Lyerly:2021:ORT]
 Robert Lyerly, Carlos Bilbao, Changwoo Min, Christopher J. Rossbach, and Binoy Ravindran. An OpenMP runtime for transparent work sharing across cache-incoherent heterogeneous nodes. *ACM Transactions on Computer Systems*, 39(1–4):1:1–1:??, November 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3505224>.
- [Lo:2016:IRE]
 David Lo, Liquan Cheng, Rama Govindaraju, Parthasarathy Ranganathan, and Christos Kozyrakis. Improving resource efficiency at scale with Heracles. *ACM Transactions on Computer Systems*, 34(2):6:1–6:??, May 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Lagar-Cavilla:2011:SVM]
 H. Andrés Lagar-Cavilla, Joseph A. Whitney, Roy Bryant, Philip Patchin, Michael Brudno, Eyal de Lara, Stephen M. Rumble, M. Satyanarayanan, and Adin Scannell. SnowFlock: Virtual

machine cloning as a first-class cloud primitive. *ACM Transactions on Computer Systems*, 29(1):2:1–2:45, February 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Lozi:2016:FPL

- [LDT⁺16] Jean-Pierre Lozi, Florian David, Gaël Thomas, Julia Lawall, and Gilles Muller. Fast and portable locking for multicore architectures. *ACM Transactions on Computer Systems*, 33(4):13:1–13:??, January 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Lev97]

Larowe:1991:ECM

- [LE91] Richard P. Larowe, Jr. and Carla Schlatter Ellis. Experimental comparison of memory management policies for NUMA multiprocessors. *ACM Transactions on Computer Systems*, 9(4):319–363, November 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-4/p319-larowe/>. [LH89]

Lo:1997:CTL

- [LEL⁺97] Jack L. Lo, Joel S. Emer, Henry M. Levy, Rebecca L. Stamm, and Dean M. Tullsen. Converting thread-level parallelism to instruction-level parallelism via simultaneous mul-

tithreading. *ACM Transactions on Computer Systems*, 15(3):322–354, August 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-3/p322-lo/>.

Levy:1997:GE

Henry M. Levy. Guest editorial. *ACM Transactions on Computer Systems*, 15(4):355–356, November 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-4/p355-levy/>.

Li:1989:MCS

Kai Li and Paul Hudak. Memory coherence in shared virtual memory systems. *ACM Transactions on Computer Systems*, 7(4):321–359, November 1989. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-4/p321-li/>.

Landwehr:1984:SMM

Carl E. Landwehr, Constance L. Heitmeyer, and John McLean. A security model for military message system. *ACM Transactions on Computer Systems*, 2(3):198–222, August 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).

- Lindsay:1984:CCR**
- [LHM⁺84b] Bruce G. Lindsay, Laura M. Haas, C. Mohan, Paul F. Wilms, and Robert A. Yost. Computation and communication in R: a distributed database manager. *ACM Transactions on Computer Systems*, 2(1):24–38, February 1984. ISSN 0734-2071 (print), 1557-7333 (electronic). Also published in/as: SOSP 9, Bretton Woods, Oct. 1983.
- Li:2016:FSA**
- [LLL⁺16] Sheng Li, Hyeontaek Lim, Victor W. Lee, Jung Ho Ahn, Anuj Kalia, Michael Kaminsky, David G. Andersen, Seongil O., Sukhan Lee, and Pradeep Dubey. Full-stack architecting to achieve a billion-requests-per-second throughput on a single key-value store server platform. *ACM Transactions on Computer Systems*, 34(2):5:1–5:??, May 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Ladin:1992:PHA**
- [LLSG92] Rivka Ladin, Barbara Liskov, Liuba Shrira, and Sanjay Ghemawat. Providing high availability using lazy replication. *ACM Transactions on Computer Systems*, 10(4):360–391, November 1992. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-4/p360-ladin/>.
- Luo:2024:ORM**
- [LLY⁺24] Shutian Luo, Chenyu Lin, Kejiang Ye, Guoyao Xu, Liping Zhang, Guodong Yang, Huanle Xu, and Chengzhong Xu. Optimizing resource management for shared microservices: a scalable system design. *ACM Transactions on Computer Systems*, 42(1–2):1:1–1:??, May 2024. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3631607>.
- Luk:2001:ACS**
- [LM01] Chi-Keung Luk and Todd C. Mowry. Architectural and compiler support for effective instruction prefetching: a cooperative approach. *ACM Transactions on Computer Systems*, 19(1):71–109, 2001. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/articles/journals/tocs/2001-19-1/p71-luk/p71-luk.pdf>; <http://www.acm.org/pubs/citations/journals/tocs/2001-19-1/p71-luk/>.
- Lai:2006:PWA**
- [LN06] Albert M. Lai and Jason Nieh. On the performance of wide-area thin-client computing. *ACM Transactions on Computer Systems*, 24(2):175–209, May 2006. CODEN ACSYEC.

- ISSN 0734-2071 (print), 1557-7333 (electronic).
- [LP93] Wei Li and Keshav Pingali. Access normalization: Loop restructuring for NUMA computers. *ACM Transactions on Computer Systems*, 11(4):353–375, November 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-4/p353-li/>.
- [LSW91] **Li:1993:ANL** Barbara Liskov, Liuba Shrira, and John Wroclawski. Efficient at-most-once messages based on synchronized clocks. *ACM Transactions on Computer Systems*, 9(2):125–142, May 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-2/p125-liskov/>.
- [LSA⁺20] **Leesatapornwongsa:2020:TWT** Tanakorn Leesatapornwongsa*, Aritra Sengupta+, Masoud Saeida Ardekani, Gustavo Petri, and Cesar A. Stuardo. Transactuations: Where transactions meet the physical world. *ACM Transactions on Computer Systems*, 36(4):13:1–13:31, June 2020. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3380907>.
- [LSPM15] **Lee:2015:SSK** Janghaeng Lee, Mehrzad Samadi, Yongjun Park, and Scott Mahlke. SKMD: Single kernel on multiple devices for transparent CPU–GPU collaboration. *ACM Transactions on Computer Systems*, 33(3):9:1–9:??, September 2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [LWZ15] **Lin:2015:KMO** Felix Xiaozhu Lin, Zhen Wang, and Lin Zhong. K2: a mobile operating system for heterogeneous coherence domains. *ACM Transactions on Computer Systems*, 33(2):4:1–4:??, June 2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [LZCZ86] **Lazowska:1986:FAP** Edward D. Lazowska, John Zahorjan, David R. Cheriton, and Willy Zwaenepoel. File access performance of diskless workstations. *ACM Transactions on Computer Systems*, 4(3):238–268, August 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-3/p238-lazowska/>.
- [Mae85] **Maekawa:1985:AME** Mamoru Maekawa. A \sqrt{N}

- algorithm for mutual exclusion in decentralized systems. *ACM Transactions on Computer Systems*, 3(2):145–159, May 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-2/p145-maekawa/> [MCB84].
- [Mar90] Keith Marzullo. Tolerating failures of continuous-valued sensors. *ACM Transactions on Computer Systems*, 8(4):284–304, November 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-4/p284-marzullo/> [MCB+93].
- [MBH+94] Timothy Mann, Andrew Birrell, Andy Hisgen, Charles Jerian, and Garret Swart. A coherent distributed file cache with directory write-behind. *ACM Transactions on Computer Systems*, 12(2):123–164, May 1994. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1994-12-2/p123-mann/>.
- [MC11] Paul D. Marinescu and George Candea. Efficient testing of recovery code using fault injection. *ACM Transactions on Computer Systems*, 29(4):11:1–11:??, December 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Marsan:1984:CGS**
- Marco Ajmone Marsan, Gianni Conte, and Gianfranco Balbo. A class of generalized stochastic Petri nets for the performance evaluation of multiprocessor systems. *ACM Transactions on Computer Systems*, 2(2):93–122, May 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Mahlke:1993:SSM**
- Scott A. Mahlke, William Y. Chen, Roger A. Bringmann, Richard E. Hank, Wen-Mei W. Hwu, B. Ramakrishna Rau, and Michael S. Schlansker. Sentinel scheduling: a model for compiler-controlled speculative execution. *ACM Transactions on Computer Systems*, 11(4):376–408, November 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-4/p376-mahlke/>.
- Mellor-Crummey:1991:ASS**
- John M. Mellor-Crummey and Michael L. Scott. Algorithms for scalable synchronization on shared-memory multiprocessors. *ACM Transactions*
- Marzullo:1990:TFC**
- Mann:1994:CDF**
- Marinescu:2011:ETR** [MCS91]

- on *Computer Systems*, 9(1):21–65, February 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-1/p21-mellor-crummey/>.
- [MF90] Chad L. Mitchell and Michael J. Flynn. The effects of processor architecture on instruction memory traffic. *ACM Transactions on Computer Systems*, 8(3):230–250, August 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-3/p230-mitchell/>.
- [MGLF84] **Mitchell:1990:EPA** Marshall K. McKusick, William N. Joy, Sam J. Leffler, and Robert S. Fabry. A fast file system for UNIX. *ACM Transactions on Computer Systems*, 2(3):181–197, August 1984. ISSN 0734-2071 (print), 1557-7333 (electronic). **McKusick:1984:FFS**
- [MG01] Avi Mendelson and Freddy Gabbay. The effect of seance communication on multiprocessing systems. *ACM Transactions on Computer Systems*, 19(2):252–281, 2001. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/articles/journals/tocs/2001-19-2/p252-mendelson/p252-mendelson.pdf>; <http://www.acm.org/pubs/citations/journals/tocs/2001-19-2/p252-mendelson/>. **Mendelson:2001:ESC** [MLS97]
- [MGW11] David Meisner, Brian T. Gold, and Thomas F. Wenisch. The PowerNap server architecture. *ACM Transactions on Computer Systems*, 29(1):3:1–3:24, February 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). **Markussen:2021:SZO**
- [MKH⁺21] Jonas Markussen, Lars Bjørlykke Kristiansen, Pål Halvorsen, Halvor Kielland-Gyrud, Håkon Kvale Stensland, and Carsten Griwodz. SmartIO: Zero-overhead device sharing through PCIe networking. *ACM Transactions on Computer Systems*, 38(1–2):2:1–2:78, July 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3462545>. **Mahmood:1997:OAM**
- [MKS97] Ausif Mahmood, Donald J. Lynch, and Roger B. Shaffer. Optimally adaptive, minimum-distance, circuit-switched routing in hypercubes. *ACM Transactions on Computer Systems*, 15(2):166–193, May 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

- URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-2/p166-mahmood/> [Mow12]
- [MMM95] Dino Mandrioli, Sandro Morasca, and Angelo Morzenti. Generating test cases for real-time systems from logic specifications. *ACM Transactions on Computer Systems*, 13(4):365–398, November 1995. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1995-13-4/p365-mandrioli/>
- [Mog92] Jeffrey C. Mogul. Network locality at the scale of processes. *ACM Transactions on Computer Systems*, 10(2):81–109, May 1992. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-2/p81-mogul/>
- [Mow98] Todd C. Mowry. Tolerating latency in multiprocessors through compiler-inserted prefetching. *ACM Transactions on Computer Systems*, 16(1):55–92, February 1998. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1998-16-1/p55-mowry/>
- [Mow12] Todd C. Mowry. Introduction to special issue APLOS 2011. *ACM Transactions on Computer Systems*, 30(1):1:1–1:??, February 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Mow13] Todd C. Mowry. Editorial. *ACM Transactions on Computer Systems*, 31(4):9:1–9:??, December 2013. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [MR97] Jeffrey C. Mogul and K. K. Ramakrishnan. Eliminating receive livelock in an interrupt-driven kernel. *ACM Transactions on Computer Systems*, 15(3):217–252, August 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-3/p217-mogul/>
- [MRF18] Jonathan Mace, Ryan Roelke, and Rodrigo Fonseca. Pivot tracing: Dynamic causal monitoring for distributed systems. *ACM Transactions on Computer Systems*, 35(4):11:1–11:??, December 2018. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

- URL https://dl.acm.org/ft_gateway.cfm?id=3208104.
- Maniatis:2005:LPP**
- [MRG⁺05] Petros Maniatis, Mema Rousopoulos, T. J. Giuli, David S. H. Rosenthal, and Mary Baker. The LOCKSS peer-to-peer digital preservation system. *ACM Transactions on Computer Systems*, 23(1):2–50, February 2005. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Maxemchuk:2001:IMS**
- [MS01] N. F. Maxemchuk and D. H. Shur. An Internet multicast system for the stock market. *ACM Transactions on Computer Systems*, 19(3):384–412, 2001. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/2001-19-3/p384-maxemchuk/>.
- Moore:2006:IID**
- [MSB⁺06] David Moore, Colleen Shannon, Douglas J. Brown, Geoffrey M. Voelker, and Stefan Savage. Inferring Internet denial-of-service activity. *ACM Transactions on Computer Systems*, 24(2):115–139, May 2006. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Mahajan:2011:DCS**
- [MSL⁺11] Prince Mahajan, Srinath Setty, Sangmin Lee, Allen Clement, Lorenzo Alvisi, Mike Dahlin, and Michael Walfish. Depot: Cloud storage with minimal trust. *ACM Transactions on Computer Systems*, 29(4):12:1–12:??, December 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- McKinley:1999:QLN**
- [MT99] Kathryn S. McKinley and Olivier Temam. Quantifying loop nest locality using SPEC’95 and the Perfect benchmarks. *ACM Transactions on Computer Systems*, 17(4):288–336, November 1999. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/1999-17-4/p288-mckinley/>.
- Malkhi:2020:ISI**
- [MT20] Dahlia Malkhi and Dan Tsafir. Introduction to the special issue on the award papers of USENIX ATC 2019. *ACM Transactions on Computer Systems*, 36(4):11:1–11:2, June 2020. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3395034>.
- McCann:1993:DPA**
- [MVZ93] Cathy McCann, Raj Vaswani, and John Zahorjan. A dynamic processor allocation policy for multiprogrammed

- shared-memory multiprocessors. *ACM Transactions on Computer Systems*, 11(2):146–178, May 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-2/p146-mccann/>.
- [MWP+01] Dylan McNamee, Jonathan Walpole, Calton Pu, Crispin Cowan, Charles Krasic, Ashvin Goel, Perry Wagle, Charles Consel, Gilles Muller, and Renauld Marlet. Specialization tools and techniques for systematic optimization of system software. *ACM Transactions on Computer Systems*, 19(2):217–251, 2001. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/articles/journals/tocs/2001-19-2/p217-mcnamee/p217-mcnamee.pdf>; <http://www.acm.org/pubs/citations/journals/tocs/2001-19-2/p217-mcnamee/>.
- [NCF06] Edmund B. Nightingale, Peter M. Chen, and Jason Flinn. Speculative execution in a distributed file system. *ACM Transactions on Computer Systems*, 24(4):361–392, November 2006. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [NCPM17] **Nishtala:2017:HAI**
Rajiv Nishtala, Paul Carpenter, Vinicius Petrucci, and Xavier Martorell. The Hipster approach for improving cloud system efficiency. *ACM Transactions on Computer Systems*, 35(3):8:1–8:28, December 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [NDU+19] **Novakovic:2019:MLI**
Stanko Novakovic, Alexandros Daglis, Dmitrii Ustiugov, Edouard Bugnion, Babak Falsafi, and Boris Grot. Mitigating load imbalance in distributed data serving with rack-scale memory pooling. *ACM Transactions on Computer Systems*, 36(2):6:1–6:??, April 2019. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3309986.
- [NEC+15] **Nair:2015:MMA**
Arun Arvind Nair, Stijn Eyerman, Jian Chen, Lizy Kurian John, and Lieven Eeckhout. Mechanistic modeling of architectural vulnerability factor. *ACM Transactions on Computer Systems*, 32(4):11:1–11:??, January 2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Ng89] **Ng:1989:UHI**
Tony P. Ng. Using histo-

- ries to implement atomic objects. *ACM Transactions on Computer Systems*, 7(4):360–393, November 1989. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-4/p360-ng/>.
- [NL03] Jason Nieh and Monica S. Lam. A SMART scheduler for multimedia applications. *ACM Transactions on Computer Systems*, 21(2):117–163, May 2003. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [NTW09] N. Ntarmos, P. Triantafyllou, and G. Weikum. Distributed hash sketches: Scalable, efficient, and accurate cardinality estimation for distributed multisets. *ACM Transactions on Computer Systems*, 27(1):2:1–2:??, February 2009. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [NVCF08] Edmund B. Nightingale, Kaushik Veeraraghavan, Peter M. Chen, and Jason Flinn. Rethink the sync. *ACM Transactions on Computer Systems*, 26(3):6:1–6:26, September 2008. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [NWO88] Michael N. Nelson, Brent B. Welch, and John K. Ousterhout. Caching in the Sprite network file system. *ACM Transactions on Computer Systems*, 6(1):134–154, February 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-1/p134-nelson/>.
- [NYN03] Jason Nieh, S. Jae Yang, and Naomi Novik. Measuring thin-client performance using slow-motion benchmarking. *ACM Transactions on Computer Systems*, 21(1):87–115, February 2003. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [OGG⁺15] John Ousterhout, Arjun Gopalan, Ashish Gupta, Ankita Kejriwal, Collin Lee, Behnam Montazeri, Diego Ongaro, Seo Jin Park, Henry Qin, Mendel Rosenblum, Stephen Rumble, Ryan Stutsman, and Stephen Yang. The RAMCloud storage system. *ACM Transactions on Computer Systems*, 33(3):7:1–7:??, September 2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Nelson:1988:CSN

Nieh:2003:SSM

Nieh:2003:MTC

Ntarmos:2009:DHS

Ousterhout:2015:RSS

Nightingale:2008:RS

- [Oka88] **Okamoto:1988:DMS**
 Tatsuaki Okamoto. A digital multisignature scheme using bijective public-key cryptosystems. *ACM Transactions on Computer Systems*, 6(4):432–441, November 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-4/p432-okamoto/>.
- [ONAO4] **Olshefski:2004:UCI**
 David Olshefski, Jason Nieh, and Dakshi Agrawal. Using Certes to infer client response time at the Web server. *ACM Transactions on Computer Systems*, 22(1):49–93, February 2004. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [OP92] **OMalley:1992:DNA**
 Sean W. O’Malley and Larry L. Peterson. A dynamic network architecture. *ACM Transactions on Computer Systems*, 10(2):110–143, May 1992. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-2/p110-o_malley/.
- [PBS89] **Peterson:1989:PUC**
 Larry L. Peterson, Nick C. Buchholz, and Richard D. Schlichting. Preserving and using context information in interprocess communication. *ACM Transactions on Computer Systems*, 7(3):217–246, August 1989. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-3/p217-peterson/>.
- [PCB+23] **Pellauer:2023:SOS**
 Michael Pellauer, Jason Clemons, Vignesh Balaji, Neal Crago, Aamer Jaleel, Donghyuk Lee, Mike O’Connor, Anghsuman Parashar, Sean Treichler, Po-An Tsai, Stephen W. Keckler, and Joel S. Emer. Symphony: Orchestrating sparse and dense tensors with hierarchical heterogeneous processing. *ACM Transactions on Computer Systems*, 41(1–4):4:1–4:??, November 2023. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3630007>.
- [PDZ00] **Pai:2000:ILU**
 Vivek S. Pai, Peter Druschel, and Willy Zwaenepoel. IO-Lite: a unified I/O buffering and caching system. *ACM Transactions on Computer Systems*, 18(1):37–66, February 2000. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/2000-18-1/p37-pai/>.

- [PE23] **Park:2023:FFM**
 Jonggyu Park and Young Ik Eom. Filesystem fragmentation on modern storage systems. *ACM Transactions on Computer Systems*, 41(1-4):3:1-3:??, November 2023. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3611386>.
- [Pet88] **Peterson:1988:PNS**
 Larry L. Peterson. The Profile naming service. *ACM Transactions on Computer Systems*, 6(4):341-364, November 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-4/p341-peterson/>.
- [PGM89] **Pittelli:1989:RST**
 Frank M. Pittelli and Héctor García-Molina. Reliable scheduling in a TMR database system. *ACM Transactions on Computer Systems*, 7(1):25-60, February 1989. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-1/p25-pittelli/>.
- [PL85] **Padmanabhan:1985:PAR**
 Krishnan Padmanabhan and Duncan H. Lawrie. Performance analysis of redundant-path networks for multiprocessor systems. *ACM Transactions on Computer Systems*, 3(2):117-144, May 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-2/p117-padmanabhan/>.
- [PLZ⁺16] **Peter:2016:AOS**
 Simon Peter, Jialin Li, Irene Zhang, Dan R. K. Ports, Doug Woos, Arvind Krishnamurthy, Thomas Anderson, and Timothy Roscoe. Arrakis: The operating system is the control plane. *ACM Transactions on Computer Systems*, 33(4):11:1-11:??, January 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [PMJPKA05] **Patino-Martinez:2005:MRC**
 Marta Patiño-Martinez, Ricardo Jiménez-Peris, Bettina Kemme, and Gustavo Alonso. MIDDLE-R: Consistent database replication at the middleware level. *ACM Transactions on Computer Systems*, 23(4):375-423, November 2005. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [PPA⁺15] **Pellauer:2015:ECC**
 Michael Pellauer, Angshuman Parashar, Michael Adler, Bushra Ahsan, Randy Allmon, Neal Crago, Kermin Fleming,

- Mohit Gambhir, Aamer Jaleel, Tushar Krishna, Daniel Lustig, Stephen Maresh, Vladimir Pavlov, Rachid Rayess, Antonia Zhai, and Joel Emer. Efficient control and communication paradigms for coarse-grained spatial architectures. *ACM Transactions on Computer Systems*, 33(3):10:1–10:??, September 2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [QBD⁺08]
- Perais:2016:ECS**
- [PS16] Arthur Perais and André Seznec. EOLE: Combining static and dynamic scheduling through value prediction to reduce complexity and increase performance. *ACM Transactions on Computer Systems*, 34(2):4:1–4:??, May 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [QTZS07]
- Palix:2014:FL**
- [PTS⁺14] Nicolas Palix, Gael Thomas, Suman Saha, Christophe Calvès, Gilles Muller, and Julia Lawall. Faults in Linux 2.6. *ACM Transactions on Computer Systems*, 32(2):4:1–4:??, June 2014. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Ray89]
- Pfitzmann:1997:SLT**
- [PW97] Birgit Pfitzmann and Michael Waidner. Strong loss tolerance of electronic coin systems. *ACM Transactions on Computer Systems*, 15(2):194–213, May 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-2/p194-pfitzmann/>. .
- Qiao:2008:IPP**
- Yi Qiao, Fabián E. Bustamante, Peter A. Dinda, Stefan Birrer, and Dong Lu. Improving peer-to-peer performance through server-side scheduling. *ACM Transactions on Computer Systems*, 26(4):10:1–10:??, December 2008. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Qin:2007:RTB**
- Feng Qin, Joseph Tucek, Yuanyuan Zhou, and Jagadeesan Sundaresan. Rx: Treating bugs as allergies—a safe method to survive software failures. *ACM Transactions on Computer Systems*, 25(3):7:1–7:??, August 2007. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Raymond:1989:TBA**
- Kerry Raymond. A tree-based algorithm for distributed mutual exclusion. *ACM Transactions on Computer Systems*, 7(1):61–77, February 1989. CODEN ACSYEC. ISSN 0734-2071

- (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-1/p61-raymond/>.
- [RBvR94] **Reiter:1994:SAF** Michael K. Reiter, Kenneth P. Birman, and Robbert van Renesse. A security architecture for fault-tolerant systems. *ACM Transactions on Computer Systems*, 12(4):340–371, November 1994. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1994-12-4/p340-reiter/>.
- [RD99] **Ronsse:1999:RFI** Michiel Ronsse and Koen De Bosschere. RecPlay: a fully integrated practical record/replay system. *ACM Transactions on Computer Systems*, 17(2):133–152, May 1999. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/1999-17-2/p133-ronsse/>.
- [RDB⁺21] **Richins:2021:ATH** Daniel Richins, Dharmisha Doshi, Matthew Blackmore, Aswathy Thulaseedharan Nair, Neha Pathapati, Ankit Patel, Brainard Daguman, Daniel Dobrijalowski, Ramesh Illikkal, Kevin Long, David Zimmerman, and Vijay Janapa Reddi. AI tax: The hidden cost of AI data center applications. *ACM Transactions on Computer Systems*, 37(1–4):3:1–3:32, March 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3440689>.
- [Ree83] **Reed:1983:IAA** David P. Reed. Implementing atomic actions on decentralized data. *ACM Transactions on Computer Systems*, 1(1):3–23, February 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Rin99] **Rinard:1999:EFG** Martin C. Rinard. Effective fine-grain synchronization for automatically parallelized programs using optimistic synchronization primitives. *ACM Transactions on Computer Systems*, 17(4):337–371, November 1999. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/1999-17-4/p337-rinard/>.
- [RJ90] **Ramakrishnan:1990:BFS** K. K. Ramakrishnan and R. Jain. A binary feedback scheme for congestion avoidance in computer networks. *ACM Transactions on Computer Systems*, 8(2):158–181, May 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

- URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-2/p158-ramakrishnan/>.
- [RLCV11] **Reddi:2011:MPE**
Vijay Janapa Reddi, Benjamin C. Lee, Trishul Chilimbi, and Kushagra Vaid. Mobile processors for energy-efficient web search. *ACM Transactions on Computer Systems*, 29(3):9:1–9:??, August 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [RO92] **Rosenblum:1992:DIL**
Mendel Rosenblum and John K. Ousterhout. The design and implementation of a log-structured file system. *ACM Transactions on Computer Systems*, 10(1):26–52, February 1992. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-1/p26-rosenblum/>.
- [Rom84] **Rom:1984:OSC**
Raphael Rom. Ordering subscribers on cable networks. *ACM Transactions on Computer Systems*, 2(4):322–334, November 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [RPC⁺13] **Rasmussen:2013:TBE**
Alexander Rasmussen, George Porter, Michael Conley, Harsha V. Madhyastha, Radhika Niranjana Mysore, Alexander Pucher, and Amin Vahdat. TritonSort: a balanced and energy-efficient large-scale sorting system. *ACM Transactions on Computer Systems*, 31(1):3:1–3:??, February 2013. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [RR99] **Raghavachari:1999:ALP**
Mukund Raghavachari and Anne Rogers. Ace: a language for parallel programming with customizable protocols. *ACM Transactions on Computer Systems*, 17(3):202–248, August 1999. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/1999-17-3/p202-raghavachari/>.
- [RS92] **Ramanathan:1992:DTC**
Parameswaran Ramanathan and Kang G. Shin. Delivery of time-critical messages using a multiple copy approach. *ACM Transactions on Computer Systems*, 10(2):144–166, May 1992. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1992-10-2/p144-ramanathan/>.
- [RS04] **Reumann:2004:SDI**
John Reumann and Kang G.

- Shin. Stateful distributed interposition. *ACM Transactions on Computer Systems*, 22(1):1–48, February 2004. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [SABL06]
- [RS10] Tom Roeder and Fred B. Schneider. Proactive obfuscation. *ACM Transactions on Computer Systems*, 28(2):4:1–4:??, July 2010. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Roeder:2010:PO]
- [RSJM21] Marcelo Ruaro, Anderson Sant’ana, Axel Jantsch, and Fernando Gehm Moraes. Modular and distributed management of many-core SoCs. *ACM Transactions on Computer Systems*, 38(1–2):1:1–1:16, July 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3458511>. [Ruaro:2021:MDM]
- [SA95] Rabin A. Sugumar and Santosh G. Abraham. Set-associative cache simulation using generalized binomial trees. *ACM Transactions on Computer Systems*, 13(1):32–56, February 1995. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1995-13-1/p32-sugumar/> [Sat89]
- [Swift:2006:RDD] Michael M. Swift, Muthukaruppan Annamalai, Brian N. Bershad, and Henry M. Levy. Recovering device drivers. *ACM Transactions on Computer Systems*, 24(4):333–360, November 2006. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [San87] Beverly A. Sanders. The information structure of distributed mutual exclusion algorithms. *ACM Transactions on Computer Systems*, 5(3):284–299, August 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-3/p284-sanders/> [Sanders:1987:ISD]
- [San88] Ravinderpal S. Sandhu. The NTree: a two dimension partial order for protection groups. *ACM Transactions on Computer Systems*, 6(2):197–222, May 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-2/p197-sandhu/> [Sandhu:1988:NTD]
- [Satyanarayanan:1989:ISL] M. Satyanarayanan. Integrating security in a large distributed system. *ACM*

- Transactions on Computer Systems*, 7(3):247–280, August 1989. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-3/p247-satyanarayanan/>
- [Sat02] M. Satyanarayanan. The evolution of Coda. *ACM Transactions on Computer Systems*, 20(2):85–124, May 2002. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Sau83a] Charles H. Sauer. Computational algorithms for state-dependent queueing networks. *ACM Transactions on Computer Systems*, 1(1):67–92, February 1983. ISSN 0734-2071 (print), 1557-7333 (electronic). See corrigendum [Sau83b].
- [Sau83b] Charles H. Sauer. Corrigendum: Computational algorithms for state-dependent queueing networks. *ACM Transactions on Computer Systems*, 1(4):369, November 1983. ISSN 0734-2071 (print), 1557-7333 (electronic). See [Sau83a].
- [SB90a] Michael D. Schroeder and Michael Burrows. Performance of the Firefly RPC. *ACM Transactions on Computer Systems*, 8(1):1–17, February 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-1/p1-schroeder/>
- [SB90b] Karsten Schwan and Win Bo. “topologies” — distributed objects on multicomputers. *ACM Transactions on Computer Systems*, 8(2):111–157, May 1990. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1990-8-2/p111-schwan/>
- [SBL00] Yasushi Saito, Brian N. Bershad, and Henry M. Levy. Manageability, availability, and performance in Porcupine: a highly scalable, cluster-based mail service. *ACM Transactions on Computer Systems*, 18(3):298, 2000. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/2000-18-3/p298-saito/>.
- [SBL05] Michael M. Swift, Brian N. Bershad, and Henry M. Levy. Improving the reliability of commodity operating systems.

ACM Transactions on Computer Systems, 23(1):77–110, February 2005. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Schroeder:1984:EGG

- [SBN84] Michael D. Schroeder, Andrew D. Birrell, and Roger M. Needham. Experience with Grapevine: The growth of a distributed system. *ACM Transactions on Computer Systems*, 2(1):3–23, February 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).

Savage:1997:EDD

- [SBN⁺97] Stefan Savage, Michael Burrows, Greg Nelson, Patrick Sobalvarro, and Thomas Anderson. Eraser: a dynamic data race detector for multithreaded programs. *ACM Transactions on Computer Systems*, 15(4):391–411, November 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-4/p391-savage/>.

Schupbach:2012:DLA

- [SBRP12] Adrian Schüpbach, Andrew Baumann, Timothy Roscoe, and Simon Peter. A declarative language approach to device configuration. *ACM Transactions on Computer Systems*, 30(1):5:1–5:??, February 2012. CODEN ACSYEC. ISSN 0734-

2071 (print), 1557-7333 (electronic).

Schiper:1991:LCA

[SBS91]

André Schiper, Kenneth Birman, and Pat Stephenson. Lightweight causal and atomic group multicast. *ACM Transactions on Computer Systems*, 9(3):272–314, August 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-3/p272-schiper/>.

Schwan:1987:HPO

[SBWT87]

Karsten Schwan, Tom Bihari, Bruce W. Weide, and Gregor Taulbee. High-performance operating system primitives for robotics and real-time control systems. *ACM Transactions on Computer Systems*, 5(3):189–231, August 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-3/p189-schwan/>.

Schwetman:1983:PSI

[Sch83]

Herbert D. Schwetman. Preface to the special issue. *ACM Transactions on Computer Systems*, 1(2):97–98, May 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).

- [Sch84] **Schneider:1984:BGA**
Fred B. Schneider. Byzantine generals in action: Implementing fail-stop processors. *ACM Transactions on Computer Systems*, 2(2):145–154, May 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [SCZM05] **Steffan:2005:SAT**
J. Gregory Steffan, Christopher Colohan, Antonia Zhai, and Todd C. Mowry. The STAMPede approach to thread-level speculation. *ACM Transactions on Computer Systems*, 23(3):253–300, August 2005. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [SFKP12] **Saez:2012:LCS**
Juan Carlos Saez, Alexandra Fedorova, David Koufaty, and Manuel Prieto. Leveraging core specialization via OS scheduling to improve performance on asymmetric multicore systems. *ACM Transactions on Computer Systems*, 30(2):6:1–6:??, April 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [SFKW14] **Silberstein:2014:GIF**
Mark Silberstein, Bryan Ford, Idit Keidar, and Emmett Witchel. GPUfs: Integrating a file system with GPUs. *ACM Transactions on Computer Systems*, 32(1):1:1–1:??, February 2014. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [SGH+13] **Smaldone:2013:OSP**
Stephen Smaldone, Benjamin Gilbert, Jan Harkes, Liviu Iftode, and Mahadev Satyanarayanan. Optimizing storage performance for VM-based mobile computing. *ACM Transactions on Computer Systems*, 31(2):5:1–5:??, May 2013. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [SH00] **Sarkar:2000:HBC**
Prasenjit Sarkar and John H. Hartman. Hint-based cooperative caching. *ACM Transactions on Computer Systems*, 18(4):387–419, 2000. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/articles/journals/tocs/2000-18-4/p387-sarkar/p387-sarkar.pdf>; <http://www.acm.org/pubs/citations/journals/tocs/2000-18-4/p387-sarkar/>.
- [Sha83] **Shamir:1983:GCS**
Adi Shamir. On the generation of cryptographically strong pseudorandom sequences. *ACM Transactions on Computer Systems*, 1(1):38–44, February 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Sha89] **Shankar:1989:VDT**
A. Udaya Shankar. Ver-

- ified data transfer protocols with variable flow control. *ACM Transactions on Computer Systems*, 7(3):281–316, August 1989. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-3/p281-shankar/>.
- [SHCG94] **Stodolsky:1994:PLD**
Daniel Stodolsky, Mark Holland, William V. Courtright II, and Garth A. Gibson. Parity logging disk arrays. *ACM Transactions on Computer Systems*, 12(3):206–235, August 1994. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1994-12-3/p206-stodolsky/>.
- [SHG95] **Singh:1995:IHB**
Jaswinder Pal Singh, John L. Hennessy, and Anoop Gupta. Implications of hierarchical N -body methods for multiprocessor architectures. *ACM Transactions on Computer Systems*, 13(2):141–202, May 1995. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1995-13-2/p141-singh/>.
- [SJS+00] **Schwartz:2000:SPA**
Beverly Schwartz, Alden W. Jackson, W. Timothy Strayer, Wenyi Zhou, R. Dennis Rockwell, and Craig Partbridge. Smart packets: applying active networks to network management. *ACM Transactions on Computer Systems*, 18(1):67–88, February 2000. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/2000-18-1/p67-schwartz/>.
- [SJS+17] **Shen:2017:SLC**
Zhiming Shen, Qin Jia, Gur-Eyal Sela, Weijia Song, Hakim Weatherspoon, and Robbert Van Renesse. Supercloud: a library cloud for exploiting cloud diversity. *ACM Transactions on Computer Systems*, 35(2):6:1–6:??, October 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [SK85] **Suzuki:1985:DME**
Ichiro Suzuki and Tadao Kasami. A distributed mutual exclusion algorithm. *ACM Transactions on Computer Systems*, 3(4):344–349, November 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-4/p344-suzuki/>.
- [Ske85] **Skeen:1985:DLP**
Dale Skeen. Determining the

- last process to fail. *ACM Transactions on Computer Systems*, 3(1):15–30, February 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-1/p15-skeen/>. [SLI11]
- [SKH⁺16] Mark Silberstein, Sangman Kim, Seonggu Huh, Xinya Zhang, Yige Hu, Amir Wated, and Emmett Witchel. GPUnet: Networking abstractions for GPU programs. *ACM Transactions on Computer Systems*, 34(3):9:1–9:??, September 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [SLJ⁺14]
- [SKZ⁺19] Xuanhua Shi, Zhixiang Ke, Yongluan Zhou, Hai Jin, Lu Lu, Xiong Zhang, Ligang He, Zhenyu Hu, and Fei Wang. Deca: a garbage collection optimizer for in-memory data processing. *ACM Transactions on Computer Systems*, 36(1):3:1–3:??, March 2019. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3310361. [Slo83]
- [SL83] A. Udaya Shankar and Simon S. Lam. An HDLC protocol specification and its verifications using image protocols. *ACM Transactions on Computer Systems*, 1(4):331–368, November 1983. ISSN 0734-2071 (print), 1557-7333 (electronic). [Slo83]
- [SLW⁺24] Sai Sha, Chuandong Li, Xiaolin Wang, Zhenlin Wang, and Arun Iyengar. EventGuard: a system architecture for securing publish–subscribe networks. *ACM Transactions on Computer Systems*, 29(4):10:1–10:??, December 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Slo83]
- [Srivatsa:2011:ESA] Mudhakar Srivatsa, Ling Liu, and Arun Iyengar. EventGuard: a system architecture for securing publish–subscribe networks. *ACM Transactions on Computer Systems*, 29(4):10:1–10:??, December 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Srivatsa:2011:ESA]
- [Samadi:2014:SPS] Mehrzad Samadi, Janghaeng Lee, D. Anoushe Jamshidi, Scott Mahlke, and Amir Hormati. Scaling performance via self-tuning approximation for graphics engines. *ACM Transactions on Computer Systems*, 32(3):7:1–7:??, September 2014. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Samadi:2014:SPS]
- [Sloan:1983:MEB] Lansing Sloan. Mechanisms that enforce bounds on packet lifetimes. *ACM Transactions on Computer Systems*, 1(4):311–330, November 1983. ISSN 0734-2071 (print), 1557-7333 (electronic). [Sloan:1983:MEB]
- [Sha:2024:HSC] Sai Sha, Chuandong Li, Xiaolin Wang, Zhenlin Wang, and Arun Iyengar. EventGuard: a system architecture for securing publish–subscribe networks. *ACM Transactions on Computer Systems*, 29(4):10:1–10:??, December 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Sha:2024:HSC]
- [Silberstein:2016:GNA] Mark Silberstein, Sangman Kim, Seonggu Huh, Xinya Zhang, Yige Hu, Amir Wated, and Emmett Witchel. GPUnet: Networking abstractions for GPU programs. *ACM Transactions on Computer Systems*, 34(3):9:1–9:??, September 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Silberstein:2016:GNA]
- [Shi:2019:DGC] Xuanhua Shi, Zhixiang Ke, Yongluan Zhou, Hai Jin, Lu Lu, Xiong Zhang, Ligang He, Zhenyu Hu, and Fei Wang. Deca: a garbage collection optimizer for in-memory data processing. *ACM Transactions on Computer Systems*, 36(1):3:1–3:??, March 2019. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Shi:2019:DGC]
- [Shankar:1983:HPS] A. Udaya Shankar and Simon S. Lam. An HDLC protocol specification and its verifications using image protocols. *ACM Transactions on Computer Systems*, 1(4):331–368, November 1983. ISSN 0734-2071 (print), 1557-7333 (electronic). [Shankar:1983:HPS]

- and Yingwei Luo. Hardware–software collaborative tiered-memory management framework for virtualization. *ACM Transactions on Computer Systems*, 42(1–2):4:1–4:??, May 2024. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3639564>. [Smi85]
- [SMH⁺21] Mohammad Sadrosadati, Amirhossein Mirhosseini, Ali Hajiabadi, Seyed Borna Ehsani, Hajar Falahati, Hamid Sarbazi-Azad, Mario Drumond, Babak Falsafi, Rachata Ausavarungnirun, and Onur Mutlu. Highly concurrent latency-tolerant register files for GPUs. *ACM Transactions on Computer Systems*, 37(1–4):1:1–1:36, March 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3419973>. [Smi86]
- [Smi84a] Alan Jay Smith. Preface to special issue. *ACM Transactions on Computer Systems*, 2(2):91–92, May 1984. ISSN 0734-2071 (print), 1557-7333 (electronic). [Smi87]
- [Smi84b] James E. Smith. Decoupled access/execute computer architectures. *ACM Transactions on Computer Systems*, 2(4):289–308, November 1984. ISSN 0734-2071 (print), 1557-7333 (electronic). [Smi87]
- Smith:1985:DCM**
- Alan Jay Smith. Disk cache — miss ratio analysis and design considerations. *ACM Transactions on Computer Systems*, 3(3):161–203, August 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-3/p161-smith/>.
- Smith:1986:IGP**
- Connie U. Smith. Independent general principles for constructing responsive software systems. *ACM Transactions on Computer Systems*, 4(1):1–31, February 1986. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1986-4-1/p1-smith/>.
- Smith:1984:PSI**
- Smith:1987:RDC**
- Alan Jay Smith. Remark on “Disk Cache — Miss Ratio Analysis and Design Consideration”. *ACM Transactions on Computer Systems*, 5(1):93, February 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-1/p93-smith/>.
- Smith:1984:DAE**

- [SMK⁺94] **Satyanarayanan:1994:LRV**
 M. Satyanarayanan, Henry H. Mashburn, Puneet Kumar, David C. Steere, and James J. Kistler. Lightweight recoverable virtual memory. *ACM Transactions on Computer Systems*, 12(1):33–57, February 1994. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-2/p157-snodgrass/>. [SNSC14]
- [SMS⁺03] **Swanson:2003:ESI**
 Steven Swanson, Luke K. McDowell, Michael M. Swift, Susan J. Eggers, and Henry M. Levy. An evaluation of speculative instruction execution on simultaneous multithreaded processors. *ACM Transactions on Computer Systems*, 21(3):314–340, August 2003. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [SRC84]
- [SMS08] **Shieh:2008:SAC**
 Alan Shieh, Andrew C. Myers, and Emin Gün Sirer. A stateless approach to connection-oriented protocols. *ACM Transactions on Computer Systems*, 26(3):8:1–8:50, September 2008. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [SS83]
- [Sno88] **Snodgrass:1988:RAM**
 Richard Snodgrass. A relational approach to monitoring complex systems. *ACM Transactions on Computer Systems*, 6(2):157–196, May 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-2/p157-snodgrass/>. [Sampson:2014:ASS]
- [Sampson:2014:ASS] Adrian Sampson, Jacob Nelson, Karin Strauss, and Luis Ceze. Approximate storage in solid-state memories. *ACM Transactions on Computer Systems*, 32(3):9:1–9:??, September 2014. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [Saltzer:1984:EEA]
- [Saltzer:1984:EEA] J. H. Saltzer, D. P. Reed, and D. D. Clark. End-to-end arguments in system design. *ACM Transactions on Computer Systems*, 2(4):277–288, November 1984. ISSN 0734-2071 (print), 1557-7333 (electronic). [Schlichting:1983:FSP]
- [Schlichting:1983:FSP] Richard D. Schlichting and Fred B. Schneider. Fail-stop processors: An approach to designing fault-tolerant computing systems. *ACM Transactions on Computer Systems*, 1(3):222–238, August 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).

- [SS84] **Schwarz:1984:SSA**
 Peter M. Schwarz and Alfred Z. Spector. Synchronizing shared abstract types. *ACM Transactions on Computer Systems*, 2(3):223–250, August 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [SS96a] **Saavedra:1996:ABC** [Sta84]
 Rafael H. Saavedra and Alan J. Smith. Analysis of benchmark characteristics and benchmark performance prediction. *ACM Transactions on Computer Systems*, 14(4):344–384, November 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1996-14-4/p344-saavedra/>.
- [SS96b] **Spasojevic:1996:ESW**
 Mirjana Spasojevic and M. Satyanarayanan. An empirical study of a wide-area distributed file system. *ACM Transactions on Computer Systems*, 14(2):200–222, May 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1996-14-2/p200-spasojevic/> [Str83].
- [SSM⁺07] **Swanson:2007:WA**
 Steven Swanson, Andrew Schwin, Martha Mercialdi, Andrew Petersen, Andrew Putnam, Ken Michelson, Mark Os-
- kin, and Susan J. Eggers. The WaveScalar architecture. *ACM Transactions on Computer Systems*, 25(2):4:1–4:??, May 2007. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Stamos:1984:SGS**
 James W. Stamos. Static grouping of small objects to enhance performance of a paged virtual memory. *ACM Transactions on Computer Systems*, 2(2):155–180, May 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Steenkiste:1997:HSN**
 Peter Steenkiste. A high-speed network interface for distributed-memory systems: Architecture and applications. *ACM Transactions on Computer Systems*, 15(1):75–109, February 1997. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1997-15-1/p75-steenkiste/>.
- Strecker:1983:TBC**
 William D. Strecker. Transient behavior of cache memories. *ACM Transactions on Computer Systems*, 1(4):281–293, November 1983. ISSN 0734-2071 (print), 1557-7333 (electronic).

Srinivasan:1999:FAL

- [SV99] V. Srinivasan and G. Varghese. Fast address lookups using controlled prefix expansion. *ACM Transactions on Computer Systems*, 17(1):1–40, February 1999. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/1999-17-1/p1-srinivasan/>.

Sheff:2023:CRB

- [SWB+23] Isaac Sheff, Xinwen Wang, Kushal Babel, Haobin Ni, Robert van Renesse, and Andrew C. Myers. Charlotte: Reformulating blockchains into a Web of composable attested data structures for cross-domain applications. *ACM Transactions on Computer Systems*, 41(1–4):2:1–2:??, November 2023. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3607534>.

Spink:2020:RSL

- [SWF20] Tom Spink, Harry Wagstaff, and Björn Franke. A retargetable system-level DBT hypervisor. *ACM Transactions on Computer Systems*, 36(4):14:1–14:24, June 2020. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3386161>.

Strom:1985:ORD

- [SY85] Robert E. Strom and Shaula Yemini. Optimistic recovery in distributed systems. *ACM Transactions on Computer Systems*, 3(3):204–226, August 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-3/p204-strom/>.

Song:2021:ANF

- [SYE+21] Won Wook Song, Youngseok Yang, Jeongyoon Eo, Jangho Seo, Joo Yeon Kim, Sanha Lee, Gyewon Lee, Taegeon Um, Haeyoon Cho, and Byung-Gon Chun. Apache Nemo: a framework for optimizing distributed data processing. *ACM Transactions on Computer Systems*, 38(3–4):5:1–5:31, November 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3468144>.

Shavit:1996:DT

- [SZ96] Nir Shavit and Asaph Zemach. Diffracting trees. *ACM Transactions on Computer Systems*, 14(4):385–428, November 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1996-14-4/p385-shavit/>.

- [TE95] Dean M. Tullsen and Susan J. Eggers. Effective cache prefetching on bus-based multiprocessors. *ACM Transactions on Computer Systems*, 13(1): 57–88, February 1995. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1995-13-1/p57-tullsen/>. [TS85]
- [Tic84] Walter F. Tichy. The string-to-string correction problem with block moves. *ACM Transactions on Computer Systems*, 2(4):309–321, November 1984. ISSN 0734-2071 (print), 1557-7333 (electronic). [TS87]
- [TL93] Chandramohan A. Thekkath and Henry M. Levy. Limits to low-latency communication on high-speed networks. *ACM Transactions on Computer Systems*, 11(2): 179–203, May 1993. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1993-11-2/p179-thekkath/>. [TS88]
- [TR84] Asser N. Tantawi and Manfred Ruschitzka. Performance analysis of checkpointing strategies. *ACM Transactions on Computer Systems*, 2(2):123–144, May 1984. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Tay:1985:EBP] Y. C. Tay and Rajan Suri. Error bounds for performance prediction in queuing networks. *ACM Transactions on Computer Systems*, 3(3):227–254, August 1985. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1985-3-3/p227-tay/>.
- [Thiebaut:1987:FC] Dominique Thiebaut and Harold S. Stone. Footprints in the cache. *ACM Transactions on Computer Systems*, 5(4):305–329, November 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-4/p305-thiebaut/>.
- [Terry:1988:MSV] Douglas B. Terry and Daniel C. Swinehart. Managing stored voice in the Etherphone system. *ACM Transactions on Computer Systems*, 6(1):3–27, February 1988. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1988-6-1/p3-terry/>.

- [TS89] **Thompson:1989:ESA**
 James G. Thompson and Alan Jay Smith. Efficient (stack) algorithms for analysis of write-back and sector memories. *ACM Transactions on Computer Systems*, 7(1):78–117, February 1989. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1989-7-1/p78-thompson/>.
- [VBR⁺04] **Verstoep:2004:CCP**
 Kees Verstoep, Raoul A. F. Bhoedjang, Tim Rühl, Henri E. Bal, and Rutger F. H. Hofman. Cluster communication protocols for parallel-programming systems. *ACM Transactions on Computer Systems*, 22(3):281–325, August 2004. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [UN^S+94] **Uhlig:1994:DTS**
 Richard Uhlig, David Nagle, Tim Stanley, Trevor Mudge, Stuart Sechrest, and Richard Brown. Design tradeoffs for software-managed TLBs. *ACM Transactions on Computer Systems*, 12(3):175–205, August 1994. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1994-12-3/p175-uhlig/>.
- [VACG09] **Vera:2009:SRL**
 Xavier Vera, Jaume Abella, Javier Carretero, and Antonio González. Selective replication: a lightweight technique for soft errors. *ACM Transactions on Computer Systems*, 27(4):8:1–8:30, December 2009. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [VBV03] **VanRenesse:2003:ARS**
 Robbert Van Renesse, Kenneth P. Birman, and Werner Vogels. Astrolabe: a robust and scalable technology for distributed system monitoring, management, and data mining. *ACM Transactions on Computer Systems*, 21(2):164–206, May 2003. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [VEK⁺07] **Vandebogart:2007:LEP**
 Steve Vandebogart, Petros Efstathopoulos, Eddie Kohler, Maxwell Krohn, Cliff Frey, David Ziegler, Frans Kaashoek, Robert Morris, and David Mazières. Labels and event processes in the Asbestos operating system. *ACM Transactions on Computer Systems*, 25(4):11:1–11:??, December 2007. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [VLW⁺12] **Veeraraghavan:2012:DPS**
 Kaushik Veeraraghavan, Dongy-

- oon Lee, Benjamin Wester, Jessica Ouyang, Peter M. Chen, Jason Flinn, and Satish Narayanasamy. DoublePlay: Parallelizing sequential logging and replay. *ACM Transactions on Computer Systems*, 30(1):3:1–3:??, February 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [VVP⁺06] **Vachharajani:2006:LSE** Manish Vachharajani, Neil Vachharajani, David A. Penry, Jason A. Blome, Sharad Malik, and David I. August. The Liberty Simulation Environment: a deliberate approach to high-level system modeling. *ACM Transactions on Computer Systems*, 24(3):211–249, August 2006. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [WABL94] **Wobber:1994:ATO** Edward Wobber, Martín Abadi, Michael Burrows, and Butler Lampson. Authentication in the Taos operating system. *ACM Transactions on Computer Systems*, 12(1):3–32, February 1994. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1994-12-1/p3-wobber/>.
- [WB91] **Wang:1991:ETD** Wen-Hann Wang and Jean-Loup Baer. Efficient trace-
- driven simulation methods for cache performance analysis. *ACM Transactions on Computer Systems*, 9(3):222–241, August 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-3/p222-wang/>.
- [WGSS96] **Wilkes:1996:HAH** John Wilkes, Richard Golding, Carl Staelin, and Tim Sullivan. The HP AutoRAID hierarchical storage system. *ACM Transactions on Computer Systems*, 14(1):108–136, February 1996. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1996-14-1/p108-wilkes/>.
- [WLMD16] **West:2016:VSK** Richard West, Ye Li, Eric Mismiser, and Matthew Danish. A virtualized separation kernel for mixed-criticality systems. *ACM Transactions on Computer Systems*, 34(3):8:1–8:??, September 2016. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [WM87] **Watson:1987:GET** Richard W. Watson and Sandy A. Mamrak. Gaining efficiency in transport services by appropriate design

- and implementation choices. *ACM Transactions on Computer Systems*, 5(2):97–120, May 1987. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [WY13]
URL <http://www.acm.org:80/pubs/citations/journals/tocs/1987-5-2/p97-watson/>.
- [WPB⁺14] Lisa Wu, Orestis Polychroniou, Raymond J. Barker, Martha A. Kim, and Kenneth A. Ross. Energy analysis of hardware and software range partitioning. *ACM Transactions on Computer Systems*, 32(3):8:1–8:??, September 2014. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [WVB⁺10] Michael Walfish, Mythili Vutukuru, Hari Balakrishnan, David Karger, and Scott Shenker. DDoS defense by offense. *ACM Transactions on Computer Systems*, 28(1):3:1–3:??, March 2010. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [WVTP01] Marcel Waldvogel, George Varghese, Jon Turner, and Bernhard Plattner. Scalable high-speed prefix matching. *ACM Transactions on Computer Systems*, 19(4):440–482, November 2001. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). [WY13]
URL <https://dl.acm.org/doi/10.1145/3524452>.
- [WZKSL15] Xi Wang, Nikolai Zeldovich, M. Frans Kaashoek, and Armando Solar-Lezama. A differential approach to undefined behavior detection. *ACM Transactions on Computer Systems*, 33(1):1:1–1:??, March 2015. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [XBO⁺21] Tong Xing, Antonio Barbalace, Pierre Olivier, Mohamed L. Karaoui, Wei Wang, and Binoy Ravindran. H-Container: Enabling heterogeneous-ISA container migration in edge computing. *ACM Transactions on Computer Systems*, 39(1–4):5:1–5:??, November 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3524452>.
- Meng-Ju Wu and Donald Yeung. Efficient reuse distance analysis of multicore scaling for loop-based parallel programs. *ACM Transactions on Computer Systems*, 31(1):1:1–1:??, February 2013. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Wu:2014:EAH**Wu:2013:ERD****Wang:2015:DAU****Walfish:2010:DDO****Xing:2021:HCE****Waldvogel:2001:SHS**

- [XDH⁺21] **Xia:2021:BIP**
 Yubin Xia, Dong Du, Zhichao Hua, Binyu Zang, Haibo Chen, and Haibing Guan. Boosting inter-process communication with architectural support. *ACM Transactions on Computer Systems*, 39(1–4):6:1–6:??, November 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3532861>.
- [XMM07] **Xu:2007:MEE**
 Ruibin Xu, Daniel Mossé, and Rami Melhem. Minimizing expected energy consumption in real-time systems through dynamic voltage scaling. *ACM Transactions on Computer Systems*, 25(4):9:1–9:??, December 2007. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [YFLS11] **Yadgar:2011:MMM**
 Gala Yadgar, Michael Factor, Kai Li, and Assaf Schuster. Management of multilevel, multienticent cache hierarchies with application hints. *ACM Transactions on Computer Systems*, 29(2):5:1–5:??, May 2011. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [YKA00] **Yeung:2000:MSM**
 Donald Yeung, John Kubiatowicz, and Anant Agarwal. Multigrain shared memory. *ACM Transactions on Computer Systems*, 18(2):154–196, May 2000. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org/pubs/citations/journals/tocs/2000-18-2/p154-yeung/>.
- [YKKK10] **Yabandeh:2010:PPI**
 Maysam Yabandeh, Nikola Knežević, Dejan Kostić, and Viktor Kuncak. Predicting and preventing inconsistencies in deployed distributed systems. *ACM Transactions on Computer Systems*, 28(1):2:1–2:??, March 2010. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [YN06] **Yuan:2006:EEC**
 Wanghong Yuan and Klara Nahrstedt. Energy-efficient CPU scheduling for multimedia applications. *ACM Transactions on Computer Systems*, 24(3):292–331, August 2006. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [YSS⁺14] **Yu:2014:OBS**
 Young Jin Yu, Dong In Shin, Woong Shin, Nae Young Song, Jae Woo Choi, Hyeong Seog Kim, Hyeonsang Eom, and Heon Young Yeom. Optimizing the block I/O subsystem for fast storage devices. *ACM Transactions on Computer Systems*, 32(2):6:1–6:??, June 2014. CODEN ACSYEC.

ISSN 0734-2071 (print), 1557-7333 (electronic).

Yang:2006:UMC

- [YTEM06] Junfeng Yang, Paul Twohey, Dawson Engler, and Madanlal Musuvathi. Using model checking to find serious file system errors. *ACM Transactions on Computer Systems*, 24(4): 393–423, November 2006. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Yu:2002:DEC

- [YV02] Haifeng Yu and Amin Vahdat. Design and evaluation of a conit-based continuous consistency model for replicated services. *ACM Transactions on Computer Systems*, 20(3):239–282, August 2002. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Yu:2006:CLA

- [YV06] Haifeng Yu and Amin Vahdat. The costs and limits of availability for replicated services. *ACM Transactions on Computer Systems*, 24(1):70–113, February 2006. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Yuan:2012:ISD

- [YZP⁺12] Ding Yuan, Jing Zheng, Soyeon Park, Yuanyuan Zhou, and Stefan Savage. Improving software diagnosability via log enhancement. *ACM Transactions on Computer Systems*, 30(1):

4:1–4:??, February 2012. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).

Zhuo:2021:DGP

- [ZCR⁺21] Youwei Zhuo, Jingji Chen, Gengyu Rao, Qinyi Luo, Yanzhi Wang, Hailong Yang, Depei Qian, and Xuehai Qian. Distributed graph processing system and processing-in-memory architecture with precise loop-carried dependency guarantee. *ACM Transactions on Computer Systems*, 37(1–4): 5:1–5:37, June 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3453681>.

Zhao:2024:CDC

- [ZCY⁺24] Laiping Zhao, Yushuai Cui, Yanan Yang, Xiaobo Zhou, Tie Qiu, Keqiu Li, and Yungang Bao. Component-distinguishable co-location and resource reclamation for high-throughput computing. *ACM Transactions on Computer Systems*, 42(1–2):2:1–2:??, May 2024. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3630006>.

Zahedi:2017:CSA

- [ZFF⁺17] Seyed Majid Zahedi, Songchun Fan, Matthew Faw, Elijah Cole, and Benjamin C. Lee. Computational sprinting: Archi-

- tecture, dynamics, and strategies. *ACM Transactions on Computer Systems*, 34(4):12:1–12:??, January 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Zha91] Lixia Zhang. VirtualClock: a new traffic control algorithm for packet-switched networks. *ACM Transactions on Computer Systems*, 9(2):101–124, May 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-2/p101-zhang/>.
- [ZHD⁺19] Boyan Zhao, Rui Hou, Jianbo Dong, Michael Huang, Sally A. Mckee, Qianlong Zhang, Yueji Liu, Ye Li, Lixin Zhang, and Dan Meng. Venice: an effective resource sharing architecture for data center servers. *ACM Transactions on Computer Systems*, 36(1):2:1–2:??, March 2019. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3310360.
- [ZMAB09] Dmitrii Zagorodnov, Keith Marzullo, Lorenzo Alvisi, and Thomas C. Bressoud. Practical and low-overhead masking of failures of TCP-based servers. *ACM Transactions on Computer Systems*, 27(2):4:1–4:??, May 2009. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Zhu:2017:OGP] Yuhao Zhu and Vijay Janapa Reddi. Optimizing general-purpose CPUs for energy-efficient mobile Web computing. *ACM Transactions on Computer Systems*, 35(1):1:1–1:??, July 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [Zhang:1991:VNT] [ZR17] Lixia Zhang. VirtualClock: a new traffic control algorithm for packet-switched networks. *ACM Transactions on Computer Systems*, 9(2):101–124, May 1991. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <http://www.acm.org:80/pubs/citations/journals/tocs/1991-9-2/p101-zhang/>.
- [Zhang:2018:BCT] Irene Zhang, Naveen Kr. Sharma, Adriana Szekeres, Arvind Krishnamurthy, and Dan R. K. Ports. Building consistent transactions with inconsistent replication. *ACM Transactions on Computer Systems*, 35(4):12:1–12:??, December 2018. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3269981.
- [Zhou:2002:CSD] Lidong Zhou, Fred B. Schneider, and Robbert Van Renesse. COCA: a secure distributed online certification authority. *ACM Transactions on Computer Systems*, 20(4):329–368, November 2002. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- [ZSS⁺18] [Zao:2019:VER] Boyan Zhao, Rui Hou, Jianbo Dong, Michael Huang, Sally A. Mckee, Qianlong Zhang, Yueji Liu, Ye Li, Lixin Zhang, and Dan Meng. Venice: an effective resource sharing architecture for data center servers. *ACM Transactions on Computer Systems*, 36(1):2:1–2:??, March 2019. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3310360.
- [ZSV02] [Zagorodnov:2009:PLO] Dmitrii Zagorodnov, Keith Marzullo, Lorenzo Alvisi, and Thomas C. Bressoud. Practical and low-overhead masking of failures of TCP-based

- Zheng:2017:RAS**
- [ZTQ⁺17] Mai Zheng, Joseph Tucek, Feng Qin, Mark Lillibridge, Bill W. Zhao, and Elizabeth S. Yang. Reliability analysis of SSDs under power fault. *ACM Transactions on Computer Systems*, 34(4):10:1–10:??, January 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Zuo:2021:SIS**
- [ZWH⁺21] Zhiqiang Zuo, Kai Wang, Aftab Hussain, Ardalan Amiri Sani, Yiyu Zhang, Shenming Lu, Wensheng Dou, Linzhang Wang, Xuandong Li, Chenxi Wang, and Guoqing Harry Xu. Systemizing interprocedural static analysis of large-scale systems code with Grasp-an. *ACM Transactions on Computer Systems*, 38(1–2):4:1–4:39, July 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3466820>.
- Zhao:2023:MIB**
- [ZXD⁺23] Jie Zhao, Jinchun Xu, Peng Di, Wang Nie, Jiahui Hu, Yanzhi Yi, Sijia Yang, Zhen Geng, Renwei Zhang, Bojie Li, Zhiliang Gan, and Xuefeng Jin. Modeling the interplay between loop tiling and fusion in optimizing compilers using affine relations. *ACM Transactions on Computer Systems*, 41(1–4):5:1–5:??, November 2023. CODEN ACSYEC.
- Zhao:2017:UMR**
- [ZY17] Minshu Zhao and Donald Yeung. Using multicore reuse distance to study coherence directories. *ACM Transactions on Computer Systems*, 35(2):4:1–4:??, October 2017. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Zdancewic:2002:SPP**
- [ZZNM02] Steve Zdancewic, Lantian Zheng, Nathaniel Nystrom, and Andrew C. Myers. Secure program partitioning. *ACM Transactions on Computer Systems*, 20(3):283–328, August 2002. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic).
- Zhang:2021:KSV**
- [ZZW⁺21] Yiming Zhang, Chengfei Zhang, Yaozheng Wang, Kai Yu, Guangtao Xue, and Jon Crowcroft. KylinX: Simplified virtualization architecture for specialized virtual appliances with strong isolation. *ACM Transactions on Computer Systems*, 37(1–4):2:1–2:27, March 2021. CODEN ACSYEC. ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3436512>.
- ISSN 0734-2071 (print), 1557-7333 (electronic). URL <https://dl.acm.org/doi/10.1145/3635305>.