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## Title word cross-reference

*k* [SLL<sup>+</sup>20].  
-way [SLL<sup>+</sup>20].  
**1** [TPFH20].  
**2013** [DH15]. **2014** [MSS16]. **2016**  
[BHHL17a, BHHL17b, Gil18].  
**3** [HDT<sup>+</sup>15].  
**Abort** [DR15]. **Abstract** [GNC<sup>+</sup>17].  
**Accelerating** [HSY<sup>+</sup>20]. **Acceleration**  
[GCF<sup>+</sup>20]. **Accelerators** [HKL<sup>+</sup>14].  
**Access** [AG18, AKMW18, HDT<sup>+</sup>15].  
**Accesses** [KD19]. **Accuracy** [BHB<sup>+</sup>15].  
**ACM** [Gib14]. **Adaptive**  
[GWWL16, JCG<sup>+</sup>14, MSA<sup>+</sup>18, MWF<sup>+</sup>19].  
**Adaptivity** [LPY18]. **Adding** [ST17].  
**Addressing** [DAC<sup>+</sup>16]. **Affine** [DMB16].  
**Against** [ES15]. **Aggregation** [GNC<sup>+</sup>17].  
**Airwaves** [GZ15]. **Algorithm** [ADMO17,  
BHB<sup>+</sup>15, CDPN19, SLL<sup>+</sup>20, SB14].  
**Algorithm-Based** [BHB<sup>+</sup>15]. **Algorithmic**  
[GNC<sup>+</sup>17]. **Algorithms** [AG18, AKPM20,  
BCRS16, CGT<sup>+</sup>17, JMT16, Kha19, KX16,  
KMVV15, MMM16, PRS18, SG15].  
**Aligners** [SMM<sup>+</sup>16]. **All-to-All** [SS19].  
**Allocating** [SA16]. **Allocation**  
[JPK<sup>+</sup>15, XZZY15]. **Allocator** [MSA<sup>+</sup>18].  
**Among** [CB16]. **Analysis**  
[PSFB19, SBF<sup>+</sup>16]. **Analytics** [WPD<sup>+</sup>17].  
**APGAS** [THC<sup>+</sup>16]. **application** [SB14].

**Applications** [AGL19, BBPS19, BGA<sup>+</sup>16, CDG17, HJWdM20, TPFH20, WMP14]. **Applied** [MA18]. **Approximate** [LPY18, ST17]. **Architectural** [HHA17]. **Architecture** [HKL<sup>+</sup>14, SMM<sup>+</sup>16]. **Assessing** [BCRS16]. **Atomicity** [GGRSY17]. **Attachment** [AKPM20]. **Attacks** [ES15]. **Autogen** [CGT<sup>+</sup>17]. **Automatic** [ALMS18, CGT<sup>+</sup>17, GGRSY17, REP<sup>+</sup>14, WMP14]. **Autotuners** [LTL<sup>+</sup>18]. **Autotuning** [BBPS19, LTL<sup>+</sup>18]. **Avoiding** [BDK15]. **Aware** [KR18].

**Balanced** [MWF<sup>+</sup>19]. **Balancing** [CDPN19, ACYC<sup>+</sup>20]. **Band** [BDK15]. **BARAN** [MSA<sup>+</sup>18]. **Based** [BGLP16, BHB<sup>+</sup>15, GCF<sup>+</sup>20, MMF<sup>+</sup>15, SG18, SLL<sup>+</sup>20]. **Better** [MRR18]. **Bimodal** [MSA<sup>+</sup>18]. **Bin** [AV19]. **Binary** [NRM20]. **Block** [SMM<sup>+</sup>16]. **Bound** [BSS18, MP15]. **Bounded** [SBF<sup>+</sup>16]. **Bounds** [AV19, CRR19, MRR18]. **Branch** [MP15]. **Branching** [CRR19, DPRR15, MRR18]. **Broadcast** [GZ15]. **BSP** [BSS18]. **Build** [LTL<sup>+</sup>18]. **Butterfly** [ST19]. **Butterfly-patterned** [ST19].

**C** [SG18]. **C-Stream** [SG18]. **Cache** [HL16, LKPP20]. **Cache-** [LKPP20]. **Cartesian** [SB14]. **Causes** [BGA<sup>+</sup>16]. **Centers** [Alb19]. **Channel** [XZZY15]. **Chief** [Bad19]. **Chip** [MSA<sup>+</sup>18, XZZY15]. **Chromatic** [KHSL16]. **Clairvoyant** [AV19]. **class** [REP<sup>+</sup>14]. **Clique** [DSMT20, MP15]. **Clos** [YNM16]. **Closure** [KH15]. **Clustering** [FLEN15, GLZ19, SZ19]. **Clusters** [CDPN19, JMNY15]. **Co** [SG18]. **Co-routine-Based** [SG18]. **Coalescing** [CRR19, DPRR15, MRR18]. **Coalescing-Branching** [CRR19, DPRR15, MRR18]. **Code** [MA18]. **Cohorting** [DMS15]. **Collective** [SG15]. **Communication** [BDK15, BSS18, CDPN19, SS19, WMP14].

**Competitive** [DKKM15]. **Competitively** [IMPT16]. **Compiling** [DMB16]. **Composable** [MG17]. **Composition** [KH15]. **Computation** [CSC<sup>+</sup>18]. **Computational** [KH15]. **Computations** [HSS15, KHSL16, KL19, MHLK18]. **Computer** [AKS<sup>+</sup>20]. **Computing** [BGHS16, HSY<sup>+</sup>20, JMNY15, Gib14]. **Concurrency** [TDB16]. **Concurrent** [GNC<sup>+</sup>17, MSD19, NRM20, VN19]. **Conjugate** [GWWL16]. **Connectivity** [PRS18]. **Conquer** [CGT<sup>+</sup>17]. **Conservation** [Alb19]. **Constraints** [AG18]. **construction** [SB14]. **Consumption** [JCG<sup>+</sup>14]. **Containers** [IS17]. **Contended** [HHA17]. **Contention** [ALB<sup>+</sup>18]. **Continuous** [DKKM15]. **Controlled** [TDB16]. **Cope** [BCRS16]. **CoREC** [DSD<sup>+</sup>20]. **Cores** [SA16]. **Counters** [ST17]. **Cover** [CRR19]. **Creation** [BGLP16]. **CUDA** [KH15]. **Customized** [GCF<sup>+</sup>20]. **Cycles** [FO19].

**Damaris** [DAC<sup>+</sup>16]. **Data** [AG18, Alb19, DAC<sup>+</sup>16, DSD<sup>+</sup>20, GNC<sup>+</sup>17, HHA17, KHSL16, MG17, RB14, ZLLD18]. **Data-Graph** [KHSL16]. **Deadline** [JMNY15]. **Deadline-Sensitive** [JMNY15]. **Decomposition** [LSE<sup>+</sup>19]. **Deep** [PSFB19]. **Dense** [BHB<sup>+</sup>15]. **Dependence** [CZS<sup>+</sup>17]. **Design** [VN19]. **Designing** [DMS15]. **Designs** [GNC<sup>+</sup>17]. **Detection** [DVS18, FO19, KUCT15, LS18]. **Deterministic** [VN19, YNM16]. **Deterministically** [KHSL16]. **Devices** [AKMW18]. **DFS** [Kha19]. **Differentiated** [CSC<sup>+</sup>18]. **Dimensions** [DVS18]. **Discovery** [CGT<sup>+</sup>17]. **Discrete** [ST19]. **Distributed** [DMB16, FO19, GLZ19, KX16, LSE<sup>+</sup>19, PRS18, SZ19, REP<sup>+</sup>14]. **Distributed-memory** [LSE<sup>+</sup>19]. **Distributions** [ST19]. **Divide** [CGT<sup>+</sup>17]. **Divide-&-Conquer** [CGT<sup>+</sup>17]. **DomLock** [KN17]. **Draw** [ST19]. **Dual** [AG18, IS17].

**Dynamic** [AKMW18, AV19, CGT<sup>+</sup>17, DSMT20, DMB16, KHSL16, KUCT15, Kha19, MMM16, MKPSA20].

**EagerMap** [CDPN19]. **Editor** [Bad19, BHHL17a, BHHL17b, Her15]. **Editor-in-Chief** [Bad19]. **Editorial** [Bad19]. **Efficient** [CZS<sup>+</sup>17, CGT<sup>+</sup>17, DR15, GNC<sup>+</sup>17, LS18, PRS16, SLL<sup>+</sup>20, SSS15, LKPP20]. **Elastic** [SG18]. **Element** [KL19]. **Embedding** [SML19]. **Empirical** [TDB16]. **Energy** [Alb19, SA16]. **Engine** [SG18]. **Enhanced** [MKPSA20]. **Enhancing** [RB14]. **Enumeration** [DSMT20]. **Equal** [KD19]. **Equal-Length** [KD19]. **Era** [HSY<sup>+</sup>20]. **Errors** [BCRS16]. **ESTIMA** [CDG17]. **Exclusion** [AH19, KD19]. **executable** [WMP14]. **Executing** [KHSL16]. **Execution** [HSS15]. **Experimental** [SBF<sup>+</sup>16]. **Explicit** [HSS15]. **Expression** [KH15]. **Extended** [ADMO17]. **Extracting** [RBJ<sup>+</sup>19]. **Extrapolating** [CDG17]. **Extreme** [TJK15]. **Extreme-Scale** [TJK15].

**Factorizations** [BHB<sup>+</sup>15]. **Fail** [BCRS16]. **Fail-Stop** [BCRS16]. **Failure** [KR18]. **Failure-Aware** [KR18]. **Failures** [BHB<sup>+</sup>15]. **Fast** [BDA<sup>+</sup>18, KMOVV15, MSD19, PRS18]. **Fault** [BHB<sup>+</sup>15]. **FEAST** [NRM20]. **Fetch** [AH19]. **Fetch-and-increment** [AH19]. **Finite** [KL19]. **Fly** [LLS<sup>+</sup>15]. **Folded** [YNM16]. **Folded-Clos** [YNM16]. **Fork** [SML19]. **Fork-join** [SML19]. **Formation** [DKKM15]. **Framework** [LKPP20, MA18]. **Free** [KL19, ZLLD18, AKPM20, NRM20]. **Frequency** [XZZY15]. **Futures** [HL16].

**Games** [BGLP16, FLEN15]. **General** [BCRS16, DMS15, MSD19]. **General-Purpose** [BCRS16]. **Generality** [IS17]. **Generalized** [BWB<sup>+</sup>19].

**Generating** [AKPM20]. **generation** [WMP14]. **Globally** [MWF<sup>+</sup>19]. **GPGPU** [MA18]. **GPOP** [LKPP20]. **GPU** [ADMO17, MGG15, WPD<sup>+</sup>17, YSS<sup>+</sup>19]. **GPUs** [ACYC<sup>+</sup>20, BDA<sup>+</sup>18, GWWL16]. **Gradient** [GWWL16]. **Granularity** [KN17]. **Graph** [CSC<sup>+</sup>18, KHSL16, KX16, LKPP20, MGG15, SZ19, WPD<sup>+</sup>17]. **Graphics** [BOU16, KL19]. **Graphs** [CSC<sup>+</sup>18, CRR19, DSMT20, DPRR15, Kha19, PRS18]. **Greedy** [KMOVV15]. **Group** [AH19]. **Guarantees** [AKMW18]. **Guest** [BHHL17a, BHHL17b, Her15]. **Gunrock** [WPD<sup>+</sup>17].

**Hardware** [HKL<sup>+</sup>14, PRS16]. **Hash** [MSD19]. **Hedonic** [FLEN15]. **Heuristics** [SA16]. **Hierarchies** [KN17]. **High** [BDA<sup>+</sup>18, KH15, KL19, MGG15, MA18, XZZY15]. **High-Frequency** [XZZY15]. **High-Order** [KL19]. **High-Performance** [MGG15]. **High-Quality** [BDA<sup>+</sup>18]. **High-Throughput** [XZZY15]. **HPC** [BBPS19]. **Hybridizing** [CZS<sup>+</sup>17]. **Hypergraph** [BDKS16]. **Hypergraphs** [BGHS16]. **Hyperobjects** [LS18]. **Hyperqueues** [VN19].

**I/O** [AGL19, BBPS19, PSFB19]. **IBM** [HKL<sup>+</sup>14]. **Identifying** [BGA<sup>+</sup>16]. **Implementation** [BDA<sup>+</sup>18, VN19]. **Implications** [MP15]. **Improve** [CDPN19]. **Improving** [JCG<sup>+</sup>14]. **In-Memory** [CDG17, DSD<sup>+</sup>20]. **In-place** [SLL<sup>+</sup>20]. **In-situ** [DSD<sup>+</sup>20]. **increment** [AH19]. **Incremental** [MKPSA20]. **Independent** [BGHS16, BDA<sup>+</sup>18]. **Information** [ES15]. **Innovations** [TPFH20]. **Insider** [ES15]. **Intermediate** [IMPT16, SML19]. **Intratile** [MHLK18]. **Introduction** [ALS18, BHHL17a, BHHL17b, BHL19, DH15, Gil18, Gro17, Her15, LDML16, Lil14, MSS16, PRS15, RLSLS19, TPFH20, Gib14]. **Inversion** [SSS15]. **IRIS** [ES15]. **Irregular**

[TPFH20, REP<sup>+</sup>14]. **Issue** [ALS18, BHHL17a, BHHL17b, BHL19, DH15, Gil18, LDML16, MSS16, PRS15, RLSLS19, TPFH20]. **Iterations** [AG18].

**Jobs** [JMNY15, KD19]. **join** [SML19]. **Joint** [SA16].

**Kernels** [ACYC<sup>+</sup>20].

**Large** [BGA<sup>+</sup>16, JMNY15, MA18, PRS18]. **Large-Scale** [BGA<sup>+</sup>16]. **Learning** [PSFB19]. **Lease** [HHA17]. **Lease/Release** [HHA17]. **Length** [KD19]. **Leveraging** [PRS16]. **Library** [MG17]. **Lightweight** [NRM20]. **Limited** [EDMSV15, LPY18]. **Linear** [DKKM15]. **Linked** [ZLLD18]. **Links** [TJK15]. **LLVM** [SML19]. **Load** [ACYC<sup>+</sup>20, CDPN19, MWF<sup>+</sup>19]. **Load-Balanced** [MWF<sup>+</sup>19]. **Load-balancing** [ACYC<sup>+</sup>20]. **Locality** [BGLP16, HL16, MG17]. **Locality-Based** [BGLP16]. **Lock** [ALB<sup>+</sup>18, DMS15, NRM20, ZLLD18]. **Lock-Free** [ZLLD18, NRM20]. **Locking** [GGRSY17, KN17]. **Locks** [DMS15]. **Loop** [DMB16]. **loops** [REP<sup>+</sup>14]. **Low** [MMM16]. **Low-Rank** [MMM16]. **Lower** [BSS18].

**Management** [ALB<sup>+</sup>18, DAC<sup>+</sup>16, TJK15]. **Mantissa** [GCF<sup>+</sup>20]. **Mapping** [CDPN19]. **MapReduce** [KMVV15]. **MASA** [SMM<sup>+</sup>16]. **Massive** [AKPM20]. **Massively** [LSE<sup>+</sup>19]. **Matching** [AG18]. **Matrix** [ASA18, ACYC<sup>+</sup>20, BDKS16, BHB<sup>+</sup>15, KL19, SSS15]. **Matrix-Free** [KL19]. **Maximal** [BGHS16, BDA<sup>+</sup>18, DSMT20]. **Maximum** [AG18, MP15]. **Mechanisms** [JMNY15]. **Memory** [ALMS18, CDG17, DMB16, DR15, EDMSV15, HDT<sup>+</sup>15, KUCT15, LKPP20, MHLK18, MMF<sup>+</sup>15, DSMT20, DSD<sup>+</sup>20, LSE<sup>+</sup>19, REP<sup>+</sup>14]. **Memory-efficient** [LKPP20]. **Memory-Starved** [MHLK18]. **Merging**

[SLL<sup>+</sup>20]. **Mesh** [HJWdM20]. **Message** [PRS16]. **methodology** [WMP14]. **Methods** [MMM16]. **Metrics** [RB14]. **Mobile** [AKMW18, FH19]. **Model** [AKPM20, BWB<sup>+</sup>19]. **Modeling** [GWWL16, MWF<sup>+</sup>19]. **Models** [ASA18]. **Moore** [HSY<sup>+</sup>20]. **MPI** [ALB<sup>+</sup>18, HDT<sup>+</sup>15, WMP14]. **MPI-3** [HDT<sup>+</sup>15]. **MST** [PRS18]. **Multi** [GWWL16, KN17, SA16]. **Multi-Cores** [SA16]. **Multi-GPUs** [GWWL16]. **Multi-Granularity** [KN17]. **Multichip** [RB14]. **Multicore** [CB16, CDPN19, RB14]. **Multicore/Multichip** [RB14]. **Multicores** [CR17]. **Multidimensional** [MHLK18]. **Multigrid** [KL19]. **Multiplatform** [SMM<sup>+</sup>16]. **Multiple** [BOU16, BHB<sup>+</sup>15, CB16, KP15]. **Multiplication** [ASA18, BDKS16]. **Multiported** [SG15]. **Multiprocessor** [SS19]. **Multisplit** [ADMO17]. **Multithreaded** [ALB<sup>+</sup>18]. **Multiway** [GNC<sup>+</sup>17]. **Mutual** [AH19, KD19].

**Narrow** [YSS<sup>+</sup>19]. **Near** [JMNY15, Kha19]. **Near-Optimal** [JMNY15]. **Nearest** [LPY18]. **Neighbor** [LPY18]. **Nests** [DMB16]. **Network** [BGLP16, MSA<sup>+</sup>18]. **Network-on-Chip** [MSA<sup>+</sup>18]. **Networks** [AKPM20, SG15, TJK15, YNM16]. **NoC** [MKPSA20]. **Nodes** [RB14]. **Noise** [HSS15]. **Noise-Tolerant** [HSS15]. **Nonblocking** [IS17]. **Nonuniform** [HSS15]. **Novel** [AKPM20]. **NUMA** [DMS15, MG17]. **Number** [AG18].

**O** [AGL19, BBPS19, PSFB19]. **Objects** [KH15]. **Oblivious** [CR17, UALK19]. **Off** [TJK15]. **On-Chip** [XZZY15]. **On-the-Fly** [LLS<sup>+</sup>15]. **On/Off** [TJK15]. **Open** [GZ15]. **OpenMP** [KH15]. **Optical** [AKS<sup>+</sup>20]. **Optimal** [JMNY15, Kha19, SS19]. **Optimization** [GWWL16, PSFB19, RB14, SA16].

**Optimizations** [MG17]. **Optimizing** [BBPS19]. **Order** [BOU16, KL19].

**Packing** [AV19]. **PageRank** [GCF+20]. **Pagoda** [YSS+19]. **Parallel** [ASA18, AKPM20, AKMW18, ADMO17, BGHS16, BGA+16, BWB+19, CZS+17, DSMT20, EDMSV15, Gib14, JMT16, Kha19, KX16, LSE+19, MP15, RBJ+19, SLL+20, SB14, WMP14]. **Parallelism** [LLS+15, RBJ+19, SML19]. **Parallelizability** [IMPT16]. **Parallelization** [MHLK18, REP+14]. **Parallelizing** [MMM16]. **Part** [RLSLS19, TPFH20]. **Partial** [GLZ19, ST19]. **Partitioning** [ASA18, BDKS16, CSC+18, SLL+20]. **Parts** [LKPP20]. **Passing** [PRS16]. **Path** [YNM16]. **patterned** [ST19]. **Peeling** [JMT16]. **Perfect** [SLL+20]. **Performance** [BBPS19, DAC+16, HKL+14, JCG+14, KH15, MGG15, MA18, RB14, SA16]. **Periodic** [AGL19]. **Personalized** [SS19]. **Petascale** [DAC+16, THC+16]. **Physical** [AKS+20]. **Physics** [KH15]. **Pipeline** [LLS+15]. **Pipelines** [JPK+15]. **place** [SLL+20]. **Placement** [KR18]. **Polar** [LSE+19]. **Polylogarithmic** [SSS15]. **Portable** [MG17]. **Post** [DAC+16, HSY+20]. **Post-Moore** [HSY+20]. **Post-Petascale** [DAC+16]. **Power** [JCG+14, TJK15]. **POWER7** [JCG+14]. **PowerEN** [HKL+14]. **PowerLyra** [CSC+18]. **PPoPP** [BHHL17a, BHHL17b, RLSLS19]. **PPoPP'12** [PRS15]. **PPoPP'14** [LDML16]. **PPoPP'15** [Gro17]. **Precise** [KUCT15]. **Precision** [GCF+20]. **Preconditioned** [GWWL16]. **Prediction** [MA18]. **Preferential** [AKPM20]. **Prefetching** [HJWdM20, JCG+14]. **Primal** [AG18]. **Probabilistic** [KR18]. **Problem** [FH19, MP15]. **Problems** [CGT+17, DKKM15]. **Process** [HSS15].

**Processes** [AKS+20, BWB+19, CB16]. **Processing** [BOU16, LKPP20, SG18]. **Processor** [HKL+14, UALK19]. **Processor-Oblivious** [UALK19]. **Processors** [KP15, KL19]. **Product** [ACYC+20]. **Production** [MA18]. **Profitable** [KP15]. **Programming** [CGT+17, HDT+15, MMM16]. **Programs** [RBJ+19]. **Protocol** [LTL+18]. **Pruning** [SMM+16]. **Purpose** [BCRS16].

**QoS** [MMF+15, MKPSA20]. **Quality** [BDA+18]. **Queues** [VN19].

**Race** [DVS18, KUCT15, LS18]. **Random** [CRR19, DPRR15, MRR18]. **Randomized** [LPY18]. **Rank** [MMM16]. **Rapidly** [LTL+18]. **Rates** [HSS15]. **Real** [BWB+19]. **Real-Time** [BWB+19]. **Reclamation** [ALMS18]. **Reconfigurable** [AKS+20, MSA+18]. **Reconfigurable-Allocator** [MSA+18]. **Record** [UALK19]. **Recurrent** [BWB+19]. **Recursive** [CGT+17, RBJ+19, SML19]. **Reducer** [LS18]. **Reduction** [BDK15, DR15]. **Relaxing** [CZS+17]. **Release** [HHA17]. **Remote** [HDT+15]. **Replay** [UALK19]. **Representation** [SML19]. **Requirements** [MMF+15]. **Resilient** [DSD+20]. **Resource** [AG18, CR17, JPK+15]. **Robot** [DKKM15]. **Robust** [ES15, KR18]. **ROC** [AKS+20]. **Root** [BGA+16]. **Routers** [XZZY15]. **routine** [SG18]. **Routing** [MWF+19, YNM16]. **Runtime** [CZS+17, DMB16, JPK+15, TJK15, YSS+19].

**Scalability** [CDG17]. **Scalable** [ALMS18, DSD+20, GGRSY17, KUCT15, KP15, LKPP20, MGG15, PSFB19]. **Scale** [AKPM20, BGA+16, TJK15]. **Scale-free** [AKPM20]. **Scaling** [ASA18, HHA17]. **Schedule** [SS19]. **Schedulers** [SBF+16, TDB16]. **Scheduling**

[AKMW18, AGL19, DMB16, EDMSV15, IMPT16, JMNY15, KD19, KHSL16, KP15]. **Scientific** [HSY<sup>+</sup>20]. **SciPAL** [KH15]. **Search** [LPY18, MP15, NRM20]. **Section** [Gro17]. **Segmentation** [GCF<sup>+</sup>20]. **Selecting** [BOU16]. **Semantic** [GGRSY17]. **Sensitive** [JMNY15]. **Sequence** [SLL<sup>+</sup>20, SMM<sup>+</sup>16]. **Server** [FH19]. **Set** [BDA<sup>+</sup>18]. **Sets** [BGHS16]. **Shape** [MP15]. **Shared** [DSMT20, DMB16]. **Shared-memory** [DSMT20]. **Sharing** [CB16]. **Shuffle** [SLL<sup>+</sup>20]. **Silent** [BCRS16]. **SIMD** [RBJ<sup>+</sup>19]. **Simple** [KX16, XZZY15, SB14]. **Simulating** [AKS<sup>+</sup>20]. **Simulations** [DAC<sup>+</sup>16]. **Single** [YNM16]. **Single-Path** [YNM16]. **situ** [DSD<sup>+</sup>20]. **Sixteen** [SA16]. **Skewed** [CSC<sup>+</sup>18]. **Software** [HJWdM20, JPK<sup>+</sup>15, MMF<sup>+</sup>15]. **Solving** [CGT<sup>+</sup>17]. **Sorting** [CR17]. **SPAA** [DH15, Gil18, MSS16]. **SPAA'15** [ALS18]. **SPAA'17** [BHL19]. **Space** [CB16, SBF<sup>+</sup>16, SLL<sup>+</sup>20]. **Space-Bounded** [SBF<sup>+</sup>16]. **Sparse** [ASA18, ACYC<sup>+</sup>20, BDKS16]. **Sparsification** [KX16, SZ19]. **Special** [ALS18, BHHL17a, BHHL17b, BHL19, DH15, Gil18, Gro17, LDML16, MSS16, PRS15, RLSLS19, TPFH20]. **specifications** [WMP14]. **Spectral** [KX16]. **Speed** [IS17, KP15]. **Speed-Scalable** [KP15]. **Staging** [DSD<sup>+</sup>20]. **Starved** [MHLK18]. **States** [BGA<sup>+</sup>16]. **Static** [DSMT20]. **Statistics** [BOU16]. **Stencil** [HSS15, MHLK18]. **Stop** [BCRS16]. **Strategies** [DKKM15]. **Strategy** [AGL19]. **Stream** [SG18, SG18]. **Streaming** [GNC<sup>+</sup>17, KMOVV15]. **Structure** [RB14]. **Structured** [HL16]. **Structures** [HHA17, ZLLD18]. **Study** [ADMO17, TDB16]. **Successive** [BDK15]. **suffix** [SB14]. **Sums** [ST19]. **Support** [CZS<sup>+</sup>17, HHA17, MKPSA20]. **Supporting** [MMF<sup>+</sup>15]. **SybilCast** [GZ15].

**Synchronization** [PRS16]. **System** [ES15, YSS<sup>+</sup>19]. **Systems** [CDPN19, KUCT15, LSE<sup>+</sup>19, MG17, SS19, TJK15, TPFH20, REP<sup>+</sup>14].

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