

# Conflict-Free Replicated Data Types

Lecture Notes in Computer Science  
, 386-400

DOI: 10.1007/978-3-642-24550-3\_29

Citation Report

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Transactional storage for geo-replicated systems. , 2011, , .   |     | 264       |
| 2  | Data Management in the Cloud: Challenges and Opportunities. Synthesis Lectures on Data Management, 2012, 4, 1-138.                  | 0.6 | 31        |
| 3  | LSEQ. , 2013, , .   |     | 33        |
| 4  | A Scalable Conflict-Free Replicated Set Data Type. , 2013, , .  |     | 6         |
| 5  | Incremental stream processing using computational conflict-free replicated data types. , 2013, , .                                  |     | 6         |
| 6  | Improving the Scalability of Geo-replication with Reservations. , 2013, , .   |     | 1         |
| 7  | p2pCoSU: A P2P Sparql/update for collaborative authoring of triple-stores. , 2013, , .  |     | 5         |
| 8  | Using commutative replicated data type for collaborative video annotation. , 2014, , .  |     | 4         |
| 9  | Byzantine Fault Tolerance for Services with Commutative Operations. , 2014, , .   |     | 13        |
| 10 | Application-Aware Byzantine Fault Tolerance. , 2014, , .  |     | 17        |
| 11 | Towards quality-of-service driven consistency for Big Data management. International Journal of Big Data Intelligence, 2014, 1, 74. | 0.4 | 10        |
| 12 | The Case for Fast and Invariant-Preserving Geo-Replication. , 2014, , .   |     | 1         |
| 13 | Making operation-based CRDTs operation-based. , 2014, , .   |     | 15        |
| 14 | Versionable, Branchable, and Mergeable Application State. , 2014, , .   |     | 2         |
| 15 | Derflow. , 2014, , .  |     | 5         |
| 16 | BASIC: An alternative to BASE for large-scale data management system. , 2014, , .   |     | 2         |
| 17 | Client-Centric Benchmarking of Eventual Consistency for Cloud Storage Systems. , 2014, , .  |     | 31        |
| 18 | Efficient state-based CRDTs by decomposition. , 2014, , .   |     | 3         |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Achieving consistency in collaborative image annotation systems. , 2014, , .  |     | 5         |
| 20 | Principles of Eventual Consistency. Foundations and Trends in Programming Languages, 2014, 1, 1-150.                                    | 1.8 | 88        |
| 21 | Write Fast, Read in the Past. , 2015, , .   |     | 48        |
| 22 | Distributed wikis: a survey. Concurrency Computation Practice and Experience, 2015, 27, 2751-2777.                                      | 2.2 | 4         |
| 23 | Merging semantics for conflict updates in geo-distributed file systems. , 2015, , .   |     | 17        |
| 24 | A Name Is Not A Name. , 2015, , .   |     | 0         |
| 25 | Lasp. , 2015, , .   |     | 7         |
| 26 | Idempotent Distributed Counters Using a Forgetful Bloom Filter. , 2015, , .   |     | 3         |
| 27 | Probabilistic latency for partial ordering. , 2015, , .   |     | 0         |
| 28 | Informed Schema Design for Column Store-Based Database Services. , 2015, , .  |     | 9         |
| 29 | Priority register: Application-defined replacement orderings for ad hoc reconciliation. , 2015, , .                                     |     | 0         |
| 30 | Conflict-Free Partially Replicated Data Types. , 2015, , .  |     | 1         |
| 31 | Exactly-Once Quantity Transfer. , 2015, , .   |     | 2         |
| 32 | Survey of Large-Scale Data Management Systems for Big Data Applications. Journal of Computer Science and Technology, 2015, 30, 163-183. | 1.5 | 37        |
| 33 | Deciding Determinism with Fairness for Simple Transducer Networks. ACM Transactions on Database Systems, 2015, 40, 1-39.                | 2.8 | 0         |
| 34 | Update Consistency for Wait-Free Concurrent Objects. , 2015, , .  |     | 9         |
| 35 | Declarative programming over eventually consistent data stores. , 2015, , .   |     | 55        |
| 36 | Designing a causally consistent protocol for geo-distributed partial replication. , 2015, , .   |     | 11        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 37 | Collaborative offline web applications using conflict-free replicated data types. , 2015, , .   |      | 2         |
| 38 | CaLibRe: A Better Consistency-Latency Tradeoff for Quorum Based Replication Systems. Lecture Notes in Computer Science, 2015, , 491-503.                                | 1.3  | 4         |
| 39 | Managing Object Versioning in Geo-Distributed Object Storage Systems. , 2016, , .   |      | 0         |
| 40 | Life Beyond Distributed Transactions on the Edge. , 2016, , .   |      | 0         |
| 41 | Operational NoSQL Systems: What's New and What's Next?. Computer, 2016, 49, 23-30.  | 1.1  | 12        |
| 42 | A reference architecture for real-time microservice API consumption. , 2016, , .  |      | 10        |
| 43 | CRATE. , 2016, , .  |      | 14        |
| 44 | ChainVoxel: A Data Structure for Scalable Distributed Collaborative Editing for 3D Models. , 2016, , .  |      | 4         |
| 45 | Integration Challenges of Pure Operation-based CRDTs in Redis. , 2016, , .  |      | 1         |
| 46 | An architecture for web-based collaborative 3D virtual spaces using DOM synchronization. , 2016, , .  |      | 2         |
| 47 | Consistency in Non-Transactional Distributed Storage Systems. ACM Computing Surveys, 2017, 49, 1-34.  | 23.0 | 69        |
| 48 | The problem with embedded CRDT counters and a solution. , 2016, , .   |      | 10        |
| 49 | Byzantine fault tolerance for collaborative editing with commutative operations. , 2016, , .  |      | 6         |
| 50 | Using conflict-free replicated data types for serverless mobile social applications. , 2016, , .  |      | 0         |
| 51 | Towards a Proof Framework for Information Systems with Weak Consistency. Lecture Notes in Computer Science, 2016, , 277-283.  | 1.3  | 1         |
| 52 | Towards Handling Constraint Network Conditions Between WoT Entities Using Conflict-Free Anti-Entropy Communication. Lecture Notes in Computer Science, 2016, , 576-580. | 1.3  | 0         |
| 53 | Optimistic Byzantine fault tolerance. International Journal of Parallel, Emergent and Distributed Systems, 2016, 31, 254-267.   | 1.0  | 21        |
| 54 | Lorq: A System for Replicated NoSQL Data Based on Consensus Quorum. Communications in Computer and Information Science, 2016, , 62-79.                                  | 0.5  | 0         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 55 | Limitations of Highly-Available Eventually-Consistent Data Stores. IEEE Transactions on Parallel and Distributed Systems, 2017, 28, 141-155. | 5.6 | 24        |
| 56 | A Conflict-Free Replicated JSON Datatype. IEEE Transactions on Parallel and Distributed Systems, 2017, 28, 2733-2746.                        | 5.6 | 53        |
| 57 | pluto. , 2017, , .   |     | 1         |
| 58 | As Secure as Possible Eventual Consistency. , 2017, , .  |     | 4         |
| 59 | Total order in opportunistic networks. Concurrency Computation Practice and Experience, 2017, 29, e4056.                                     | 2.2 | 2         |
| 60 | Verifying strong eventual consistency in distributed systems. , 2017, 1, 1-28.   |     | 34        |
| 61 | Blazes. ACM Transactions on Database Systems, 2017, 42, 1-31.  | 2.8 | 4         |
| 62 | System Programming in Rust. , 2017, , .  |     | 31        |
| 63 | Semantics-Driven Optimistic Data Replication: Towards a Framework Supporting Software Architects and Developers. , 2017, , .                 |     | 5         |
| 64 | Consistency Types for Safe and Efficient Distributed Programming. , 2017, , .  |     | 5         |
| 65 | Concurrency-based and user-centric collaboration for distributed compound document authoring. , 2017, , .                                    |     | 3         |
| 66 | Enabling Near Real-Time Collaboration in a Distributed Multimedia Editing Environment. , 2017, , .   |     | 0         |
| 67 | DottedDB: Anti-Entropy without Merkle Trees, Deletes without Tombstones. , 2017, , .   |     | 4         |
| 68 | Geo-distribution of actor-based services. , 2017, 1, 1-26.   |     | 11        |
| 69 | Monotonicity Types for Distributed Dataflow. , 2017, , .   |     | 4         |
| 70 | Fireplug: Flexible and robust N-version geo-replication of graph databases. , 2018, , .  |     | 4         |
| 71 | Conflict-Free Replicated Data Types CRDTs. , 2018, , 1-10.   |     | 30        |
| 72 | Delta state replicated data types. Journal of Parallel and Distributed Computing, 2018, 111, 162-173.  | 4.1 | 40        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 73 | An adaptive peer-sampling protocol for building networks of browsers. World Wide Web, 2018, 21, 629-661.  | 4.0 | 10        |
| 74 | Comprehensive Data Tree by Actor Messaging for Incremental Hierarchical Clustering. , 2018, , .   |     | 2         |
| 75 | Database Consistency Models. , 2018, , 1-11.  |     | 0         |
| 76 | Observable atomic consistency for CvRDTs. , 2018, , .   |     | 9         |
| 77 | End-to-end encrypted scalable abstract data types over ICN. , 2018, , .   |     | 4         |
| 78 | Analysis and Design of DOORS, in the Context of Consistency, Availability, Partitioning and Latency. , 2018, , .                                      |     | 2         |
| 79 | Ensuring referential integrity under causal consistency. , 2018, , .  |     | 1         |
| 80 | Fine-grained distributed consistency guarantees with effect orchestration. , 2018, , .  |     | 2         |
| 82 | Vegvisir: A Partition-Tolerant Blockchain for the Internet-of-Things. , 2018, , .   |     | 63        |
| 83 | A Distributed Systems Perspective on Industrial IoT. , 2018, , .  |     | 21        |
| 84 | Constraining the eventual in eventual consistency. , 2018, , .  |     | 0         |
| 85 | Towards Model-Driven Business Apps for Wearables. Lecture Notes in Computer Science, 2018, , 3-17.  | 1.3 | 2         |
| 86 | Towards social collaborative editing of distributed linked data. , 2018, , .  |     | 2         |
| 87 | Does the Operational Model Capture Partition Tolerance in Distributed Systems?. Lecture Notes in Computer Science, 2019, , 400-407.                   | 1.3 | 1         |
| 88 | Higher-Order Patterns in Replicated Data Types. , 2019, , .   |     | 5         |
| 89 | An optimized RGA supporting selective undo for collaborative text editing systems. Journal of Parallel and Distributed Computing, 2019, 132, 310-330. | 4.1 | 11        |
| 90 | Efficient Synchronization of State-Based CRDTs. , 2019, , .   |     | 17        |
| 91 | A fault-tolerant programming model for distributed interactive applications. , 2019, 3, 1-29.   |     | 13        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 92  | Interleaving anomalies in collaborative text editors. , 2019, , .   |     | 7         |
| 93  | Invariant Safety for Distributed Applications. , 2019, , .  |     | 2         |
| 94  | Putting Order in Strong Eventual Consistency. Lecture Notes in Computer Science, 2019, , 36-56.                                       | 1.3 | 9         |
| 95  | RDF Graph Stores as Convergent Datatypes. , 2019, , .   |     | 1         |
| 96  | Distributed Personal Cloud Storage without Third Parties. IEEE Transactions on Parallel and Distributed Systems, 2019, 30, 2434-2448. | 5.6 | 8         |
| 97  | The Web Browser as Distributed Application Server. , 2019, , .  |     | 11        |
| 98  | Anna: A KVS For Any Scale. IEEE Transactions on Knowledge and Data Engineering, 2019, , 1-1.  | 5.7 | 21        |
| 99  | Global Data Plane: A Federated Vision for Secure Data in Edge Computing. , 2019, , .  |     | 2         |
| 100 | DIMON: Distributed Monitoring System for Decentralized Edge Clouds in Guifi.net. , 2019, , .  |     | 4         |
| 101 | The Notion of Universality in Crash-Prone Asynchronous Message-Passing Systems: A Tutorial. , 2019, , .                               |     | 1         |
| 102 | Merkle Search Trees: Efficient State-Based CRDTs in Open Networks. , 2019, , .  |     | 12        |
| 103 | A sim2real framework enabling decentralized agents to execute MADDPG tasks. , 2019, , .   |     | 1         |
| 104 | Memory efficient CRDTs in dynamic environments. , 2019, , .   |     | 5         |
| 105 | Mergeable replicated data types. , 2019, 3, 1-29.   |     | 14        |
| 106 | You Don't Need a Ledger. , 2019, , .  |     | 5         |
| 107 | Scalable eventually consistent counters over unreliable networks. Distributed Computing, 2019, 32, 69-89.                             | 0.8 | 0         |
| 108 | LiteDoc: Make Collaborative Editing Fast, Scalable, and Robust. , 2020, , .   |     | 4         |
| 109 | A Control Loop-based Algorithm for Operational Transformation. , 2020, , .  |     | 0         |

| #   | ARTICLE   | IF   | CITATIONS |
|-----|---|------|-----------|
| 110 | Semantically Correct and Intent Defined Commutativity in Distributed Systems. , 2020, , .   |      | 0         |
| 111 | An Information-Centric Networking Based Registry for Decentralized Identifiers and Verifiable Credentials. IEEE Access, 2020, 8, 137198-137208. | 4.2  | 20        |
| 112 | Online Payments by Merely Broadcasting Messages. , 2020, , .  |      | 17        |
| 113 | REDEMON: Resilient Decentralized Monitoring System for Edge Infrastructures. , 2020, , .  |      | 1         |
| 114 | Jupiter Made Abstract, and Then Refined. Journal of Computer Science and Technology, 2020, 35, 1343-1364.                                       | 1.5  | 1         |
| 115 | PnyxDB: a Lightweight Leaderless Democratic Byzantine Fault Tolerant Replicated Datastore. , 2020, , .  |      | 6         |
| 116 | Optimal State Replication in Stateful Data Planes. IEEE Journal on Selected Areas in Communications, 2020, 38, 1388-1400.                       | 14.0 | 6         |
| 117 | Fireplug: Efficient and Robust Geo-Replication of Graph Databases. IEEE Transactions on Parallel and Distributed Systems, 2020, 31, 1942-1953.  | 5.6  | 3         |
| 118 | Data Consistency in the 5G Specification. , 2020, , .   |      | 0         |
| 119 | A scalable sequence encoding for collaborative editing. Concurrency Computation Practice and Experience, 2021, 33, e4108.                       | 2.2  | 3         |
| 120 | A conflict-free replicated data type for collaborative annotation systems. Concurrency Computation Practice and Experience, 2021, 33, e5670.    | 2.2  | 0         |
| 121 | Interactive checks for coordination avoidance. VLDB Journal, 2021, 30, 71-92.   | 4.1  | 1         |
| 122 | Autoscaling tiered cloud storage in Anna. VLDB Journal, 2021, 30, 25-43.  | 4.1  | 9         |
| 123 | Sound Verification Procedures for Temporal Properties of Infinite-State Systems. Lecture Notes in Computer Science, 2021, , 337-360.            | 1.3  | 1         |
| 124 | ASPAS: As Secure as Possible Available Systems. Lecture Notes in Computer Science, 2021, , 57-73.   | 1.3  | 2         |
| 125 | Verifying Weakly Consistent Transactional Programs Using Symbolic Execution. Lecture Notes in Computer Science, 2021, , 261-278.                | 1.3  | 2         |
| 126 | Consensus-Free Ledgers When Operations of Distinct Processes are Commutative. Lecture Notes in Computer Science, 2021, , 359-370.               | 1.3  | 2         |
| 127 | Foundations of Consistency Types for a Higher-Order Distributed Language. Lecture Notes in Computer Science, 2021, , 49-63.                     | 1.3  | 0         |



| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 128 | Decentralized SDN Control Plane for a Distributed Cloud-Edge Infrastructure: A Survey. IEEE Communications Surveys and Tutorials, 2021, 23, 256-281.   | 39.4 | 42        |
| 129 | Analysis of the Matrix Event Graph Replicated Data Type. IEEE Access, 2021, 9, 28317-28333.  | 4.2  | 2         |
| 130 | varIED: an editor for collaborative, real-time feature modeling. Empirical Software Engineering, 2021, 26, 1.  | 3.9  | 4         |
| 131 | Rearchitecting Kubernetes for the Edge. , 2021, , .  |      | 28        |
| 132 | Samya: A Geo-Distributed Data System for High Contention Aggregate Data. , 2021, , .   |      | 1         |
| 133 | Bringing runtime verification home: a case study on the hierarchical monitoring of smart homes using decentralized specifications. International Journal on Software Tools for Technology Transfer, 2022, 24, 159-181. | 1.9  | 1         |
| 135 | Repairing serializability bugs in distributed database programs via automated schema refactoring. , 2021, , .  |      | 3         |
| 136 | A semi-transparent selective undo algorithm for multi-user collaborative editors. Frontiers of Computer Science, 2021, 15, 1.  | 2.4  | 6         |
| 137 | Thinking in events. , 2021, , .  |      | 1         |
| 138 | CRDTs for truly concurrent file systems. , 2021, , .   |      | 2         |
| 139 | Augmenting SQLite for Local-First Software. Communications in Computer and Information Science, 2021, , 247-257.   | 0.5  | 0         |
| 140 | On the Feasibility of Byzantine Agreement to Secure Fog/Edge Data Management. Advances in Information Security, 2021, , 121-143.   | 1.2  | 1         |
| 141 | On Mixing Eventual and Strong Consistency: Acute Cloud Types. IEEE Transactions on Parallel and Distributed Systems, 2022, 33, 1338-1356.  | 5.6  | 2         |
| 142 | Supporting Undo and Redo for Replicated Registers in Collaborative Applications. Lecture Notes in Computer Science, 2021, , 195-205.   | 1.3  | 0         |
| 143 | Automated Parameterized Verification of CRDTs. Lecture Notes in Computer Science, 2019, , 459-477.   | 1.3  | 6         |
| 145 | Proving the Safety of Highly-Available Distributed Objects. Lecture Notes in Computer Science, 2020, , 544-571.  | 1.3  | 12        |
| 146 | Transactions on Mergeable Objects. Lecture Notes in Computer Science, 2015, , 427-444.   | 1.3  | 2         |
| 147 | Efficient State-Based CRDTs by Delta-Mutation. Lecture Notes in Computer Science, 2015, , 62-76.   | 1.3  | 26        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 148 | A Unified Internal Representation of the Outer World for Social Robotics. Advances in Intelligent Systems and Computing, 2016, , 733-744. | 0.6 | 3         |
| 150 | A Denotational View of Replicated Data Types. Lecture Notes in Computer Science, 2017, , 138-156.   | 1.3 | 2         |
| 152 | Conflict-Free Replicated Data Types CRDTs. , 2019, , 491-500.   |     | 6         |
| 153 | Eventual Consistency for CRDTs. Lecture Notes in Computer Science, 2018, , 968-995.   | 1.3 | 4         |
| 154 | Eventually Consistent Transactions. Lecture Notes in Computer Science, 2012, , 67-86.   | 1.3 | 48        |
| 155 | Cloud Types for Eventual Consistency. Lecture Notes in Computer Science, 2012, , 283-307.   | 1.3 | 62        |
| 156 | Brief Announcement: Semantics of Eventually Consistent Replicated Sets. Lecture Notes in Computer Science, 2012, , 441-442.               | 1.3 | 13        |
| 157 | Optimized OR-Sets without Ordering Constraints. Lecture Notes in Computer Science, 2014, , 227-241.                                       | 1.3 | 8         |
| 158 | Making Operation-Based CRDTs Operation-Based. Lecture Notes in Computer Science, 2014, , 126-140.   | 1.3 | 20        |
| 159 | Formal Specification and Verification of CRDTs. Lecture Notes in Computer Science, 2014, , 33-48.   | 1.3 | 18        |
| 160 | Composite Replicated Data Types. Lecture Notes in Computer Science, 2015, , 585-609.  | 1.3 | 7         |
| 161 | A Classification of Replicated Data for the Design of Eventually Consistent Domain Models. , 2020, , .                                    |     | 4         |
| 162 | Conflict-Free Replicated Relations for Multi-Synchronous Database Management at Edge. , 2020, , .   |     | 7         |
| 163 | Declarative programming over eventually consistent data stores. ACM SIGPLAN Notices, 2015, 50, 413-424.                                   | 0.2 | 13        |
| 164 | Near Real-Time Peer-to-Peer Shared Editing on Extensible Data Types. , 2016, , .  |     | 24        |
| 165 | On the Monitoring of Decentralized Specifications. ACM Transactions on Software Engineering and Methodology, 2020, 29, 1-57.              | 6.0 | 12        |
| 166 | Local-first software: you own your data, in spite of the cloud. , 2019, , .   |     | 39        |
| 167 | On the FaaS Track. , 2019, , .  |     | 59        |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 168 | Real Differences between OT and CRDT under a General Transformation Framework for Consistency Maintenance in Co-Editors. Proceedings of the ACM on Human-Computer Interaction, 2020, 4, 1-26. | 3.3 | 8         |
| 169 | Moving elements in list CRDTs. , 2020, , .  |     | 5         |
| 170 | A low-cost set CRDT based on causal lengths. , 2020, , .  |     | 4         |
| 171 | PushPin. , 2020, , .  |     | 8         |
| 172 | Making edge-computing resilient. , 2020, , .  |     | 6         |
| 173 | Interactive checks for coordination avoidance. Proceedings of the VLDB Endowment, 2018, 12, 14-27.  | 3.8 | 8         |
| 174 | Autoscaling tiered cloud storage in Anna. Proceedings of the VLDB Endowment, 2019, 12, 624-638.   | 3.8 | 17        |
| 178 | Aligned, Purpose-Driven Cooperation: The Future Way of System Development. Lecture Notes in Computer Science, 2021, , 426-449.  | 1.3 | 8         |
| 179 | A Highly-Available Move Operation for Replicated Trees. IEEE Transactions on Parallel and Distributed Systems, 2022, 33, 1711-1724.   | 5.6 | 4         |
| 180 | Flow-FL: Data-Driven Federated Learning for Spatio-Temporal Predictions in Multi-Robot Systems. , 2021, , .   |     | 13        |
| 181 | Contract-based return-value commutativity: safely exploiting contract-based commutativity for faster serializable transactions. , 2021, , .   |     | 0         |
| 182 | ECROs: building global scale systems from sequential code. , 2021, 5, 1-30.   |     | 7         |
| 183 | Symmetric distributed applications. , 2021, , .   |     | 0         |
| 184 | CScale â€“ A Programming Model for Scalable and Reliable Distributed Applications. Lecture Notes in Computer Science, 2012, , 148-156.  | 1.3 | 0         |
| 186 | Bitbox: Eventually Consistent File Sharing. Lecture Notes in Computer Science, 2013, , 274-278.   | 1.3 | 0         |
| 187 | Pluralism Ignored: The Church-Turing Thesis and Philosophical Practice. Lecture Notes in Computer Science, 2014, , 373-382.   | 1.3 | 0         |
| 190 | From Sequential Specifications to Eventual Consistency. Lecture Notes in Computer Science, 2015, , 247-259.   | 1.3 | 1         |
| 191 | Bounded Implementations of Replicated Data Types. Lecture Notes in Computer Science, 2015, , 355-372.   | 1.3 | 1         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 193 | Designing for Scalability and Trustworthiness in mHealth Systems. Lecture Notes in Computer Science, 2015, , 114-133.   | 1.3 | 3         |
| 194 | Efficient Eventual Consistency in Collaborative Image Annotation Framework. Journal of Advances in Information Technology, 2015, , 9-17.  | 2.9 | 0         |
| 195 | Optimistic Scheduling: facilitating the collaboration by prioritizing the individual needs. EAI Endorsed Transactions on Collaborative Computing, 2015, 1, 150821.  | 0.2 | 0         |
| 196 | A Privacy-Friendly Model for an Efficient and Effective Activity Scheduling Inside Dynamic Virtual Organizations. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2016, , 303-308. | 0.3 | 1         |
| 197 | Access Control for Weakly Consistent Replicated Information Systems. Lecture Notes in Computer Science, 2016, , 82-97.  | 1.3 | 6         |
| 198 | Multi-datacenter Consistency Properties. , 2016, , 1-7.   |     | 0         |
| 199 | Layered Consistency Management for Advanced Collaborative Compound Document Authoring. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2016, , 281-288.                            | 0.3 | 3         |
| 200 | Quality-Aware Reactive Programming for the Internet of Things. Lecture Notes in Computer Science, 2017, , 180-195.  | 1.3 | 4         |
| 201 | Optimistic Replication and Resolution. , 2017, , 1-8.   |     | 0         |
| 202 | Relaxed Data Types as Consistency Conditions. Lecture Notes in Computer Science, 2017, , 142-156.   | 1.3 | 0         |
| 203 | Replicated Data Types. , 2017, , 1-5.   |     | 2         |
| 204 | formic: Building Collaborative Applications with Operational Transformation. Lecture Notes in Computer Science, 2017, , 138-145.  | 1.3 | 0         |
| 205 | Optimistic Replication and Resolution. , 2017, , 1-8.   |     | 0         |
| 206 | EPTL - A Temporal Logic for Weakly Consistent Systems (Short Paper). Lecture Notes in Computer Science, 2017, , 236-242.  | 1.3 | 1         |
| 207 | The scalable commutativity rule. Communications of the ACM, 2017, 60, 83-90.  | 4.5 | 6         |
| 208 | Towards a Collaborative Editing System on 3DÀSpace. Lecture Notes on Data Engineering and Communications Technologies, 2018, , 648-657.   | 0.7 | 0         |
| 210 | Multi-datacenter Consistency Properties. , 2018, , 2320-2327.   |     | 0         |
| 211 | Geo-Replication Models. , 2018, , 1-7.  |     | 0         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 212 | From Secure Messaging to Secure Collaboration. Lecture Notes in Computer Science, 2018, , 179-185.   | 1.3 | 2         |
| 213 | Pluggable Scheduling for the Reactor Programming Model. Lecture Notes in Computer Science, 2018, , 125-154.  | 1.3 | 3         |
| 214 | TARDiS: A Branch-and-Merge Approach to Weak Consistency. , 2018, , 1-7.  |     | 0         |
| 215 | TARDiS: A Branch-and-Merge Approach to Weak Consistency. , 2019, , 1672-1678.  |     | 0         |
| 216 | On the Complexity of Checking Consistency for Replicated Data Types. Lecture Notes in Computer Science, 2019, , 324-343.   | 1.3 | 1         |
| 217 | Geo-replication Models. , 2019, , 783-789.   |     | 0         |
| 218 | Database Consistency Models. , 2019, , 591-601.  |     | 0         |
| 219 | Snapdoc: Authenticated snapshots with history privacy in peer-to-peer collaborative editing. Proceedings on Privacy Enhancing Technologies, 2019, 2019, 210-232. | 2.8 | 5         |
| 220 | Efficient renaming in sequence CRDTs. , 2020, , .  |     | 2         |
| 221 | Practical client-side replication. Proceedings of the VLDB Endowment, 2020, 13, 2590-2605.   | 3.8 | 11        |
| 222 | Keeping CALM. Communications of the ACM, 2020, 63, 72-81.  | 4.5 | 10        |
| 223 | Demand-Driven Data Acquisition for Large Scale Fleets. Sensors, 2021, 21, 7190.  | 3.8 | 1         |
| 224 | Decentralized Kubernetes Federation Control Plane. , 2020, , .   |     | 8         |
| 225 | Secure Conflict-free Replicated Data Types. , 2021, , .  |     | 5         |
| 226 | A social link based private storage cloud. , 2020, , .   |     | 1         |
| 227 | Hampa: Solver-Aided Recency-Aware Replication. Lecture Notes in Computer Science, 2020, , 324-349.   | 1.3 | 2         |
| 228 | Semantics, Specification, and Bounded Verification of Concurrent Libraries in Replicated Systems. Lecture Notes in Computer Science, 2020, , 251-274.            | 1.3 | 3         |
| 229 | Challenges in Designing a Distributed Cryptographic File System. Lecture Notes in Computer Science, 2020, , 177-192.   | 1.3 | 1         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 230 | Banyan: Coordination-Free Distributed Transactions over Mergeable Types. Lecture Notes in Computer Science, 2020, , 231-250.                            | 1.3 | 0         |
| 231 | A Monitoring System for Distributed Edge Infrastructures with Decentralized Coordination. Lecture Notes in Computer Science, 2020, , 42-58.             | 1.3 | 0         |
| 232 | Combining State- and Event-Based Semantics to Verify Highly Available Programs. Lecture Notes in Computer Science, 2020, , 213-232.                     | 1.3 | 1         |
| 233 | Collaborative SPARQL Query Processing for Decentralized Semantic Data. Lecture Notes in Computer Science, 2020, , 320-335.                              | 1.3 | 1         |
| 234 | Implementation Correctness for Replicated Data Types, Categorically. Lecture Notes in Computer Science, 2020, , 283-303.                                | 1.3 | 0         |
| 235 | The intrinsic cost of causal consistency. , 2020, , .   |     | 0         |
| 236 | On combining fault tolerance and partial replication with causal consistency. , 2020, , .   |     | 1         |
| 237 | Chronofold. , 2020, , .   |     | 0         |
| 238 | Brief Announcement: The Only Undoable CRDTs are Counters. , 2020, , .   |     | 2         |
| 239 | Causal and Total Order in Opportunistic Networks. Advances in Wireless Technologies and Telecommunication Book Series, 0, , 221-262.                    | 0.4 | 3         |
| 240 | Towards the next generation of reactive model transformations on low-code platforms. , 2020, , .  |     | 7         |
| 241 | Verifying replicated data types with typeclass refinements in Liquid Haskell. , 2020, 4, 1-30.  |     | 8         |
| 242 | On the Impossibility of Confidentiality, Integrity and Accessibility in Highly-Available File Systems. Lecture Notes in Computer Science, 2021, , 3-18. | 1.3 | 1         |
| 243 | Delta-State JSON CRDT: Putting Collaboration on Solid Ground. Lecture Notes in Computer Science, 2021, , 474-478.                                       | 1.3 | 1         |
| 244 | Sliding Window CRDT Sketches. , 2021, , .   |     | 1         |
| 245 | Collaborative Model-Driven Software Engineering: A Systematic Update. , 2021, , .   |     | 9         |
| 246 | Strong eventual consistency of the collaborative editing framework WOOT. Distributed Computing, 0, , 1.   | 0.8 | 0         |
| 247 | A Generic Specification Framework for Weakly Consistent Replicated Data Types. , 2020, , .  |     | 1         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 249 | Opportunities for optimism in contended main-memory multicore transactions. VLDB Journal, 2022, 31, 1239-1261.  | 4.1 | 1         |
| 250 | Multi-core accelerated CRDT for large-scale and dynamic collaboration. Journal of Supercomputing, 2022, 78, 10799-10828.  | 3.6 | 2         |
| 251 | Asynchronous reconfiguration with Byzantine failures. Distributed Computing, 2022, 35, 477-502.   | 0.8 | 2         |
| 252 | Making CRDTs Byzantine fault tolerant. , 2022, , .  |     | 7         |
| 253 | Relaxed Paxos. , 2022, , .  |     | 1         |
| 254 | MEChain: A Multi-layer Blockchain Structure with Hierarchical Consensus for Secure EHR System. , 2021, , .  |     | 1         |
| 255 | Highly-available and consistent group collaboration at the edge with colony. , 2021, , .  |     | 3         |
| 256 | An AST-based consistency maintenance scheme for cross-chain digital assets. CCF Transactions on Pervasive Computing and Interaction, 2022, 4, 142-157.                          | 2.6 | 2         |
| 257 | Efficient Renaming in Sequence CRDTs. IEEE Transactions on Parallel and Distributed Systems, 2022, , 1-1.   | 5.6 | 0         |
| 258 | Remove-Win: a Design Framework for Conflict-free Replicated Data Types. , 2021, , .   |     | 1         |
| 259 | Mastering Eventual Consistency. , 2022, , .   |     | 0         |
| 260 | Towards the design of efficient and versatile cognitive robotic architecture based on distributed, low-latency working memory. , 2022, , .                                      |     | 1         |
| 261 | Hamband: RDMA replicated data types. , 2022, , .  |     | 0         |
| 262 | Blended modeling in commercial and open-source model-driven software engineering tools: A systematic study. Software and Systems Modeling, 2023, 22, 415-447.                   | 2.7 | 13        |
| 263 | An Efficient Approach to Move Elements in a Distributed Geo-Replicated Tree. , 2022, , .  |     | 0         |
| 264 | Hypergraphs as Conflict-Free Partially Replicated Data Types. Lecture Notes in Computer Science, 2022, , 417-432.   | 1.3 | 0         |
| 265 | Coordination-Free Multi-Domain NFV Orchestration for Consistent VNF Forwarding Graph Reconfiguration. IEEE Transactions on Network and Service Management, 2022, 19, 5133-5151. | 4.9 | 2         |
| 266 | Toward the InterPlanetary Health Layer for the Internet of Medical Things With Distributed Ledgers and Storages. IEEE Access, 2022, 10, 82883-82895.                            | 4.2 | 3         |

| #   | ARTICLE   | IF  | CITATIONS |
|-----|---|-----|-----------|
| 267 | Seamless Synchronization for Collaborative Web Services. Lecture Notes in Computer Science, 2022, , 311-314.  | 1.3 | 2         |
| 268 | Differentiated Consistency for Worldwide Gossips. IEEE Transactions on Parallel and Distributed Systems, 2023, 34, 1-15.                                      | 5.6 | 1         |
| 269 | Decentralized platforms: Goals, challenges, and solutions. , 2022, , .  |     | 1         |
| 270 | Scalable and Bounded-time Decisions on Edge Device Network using Eclipse Zenoh. , 2022, , .   |     | 0         |
| 272 | Katara: synthesizing CRDTs with verified lifting. , 2022, 6, 1349-1377.   |     | 5         |
| 273 | Conflict management techniques for model merging: a systematic mapping review. Software and Systems Modeling, 2023, 22, 1031-1079.                            | 2.7 | 5         |
| 274 | Modular verification of op-based CRDTs in separation logic. , 2022, 6, 1788-1816.   |     | 2         |
| 275 | Real-time collaborative multi-level modeling by conflict-free replicated data types. Software and Systems Modeling, 2023, 22, 1131-1150.                      | 2.7 | 5         |
| 276 | Replicated Versioned Data Structures for Wide-Area Distributed Systems. IEEE Transactions on Parallel and Distributed Systems, 2022, , 1-18.                  | 5.6 | 0         |
| 277 | Log-Based CRDT for Edge Applications. , 2022, , .   |     | 0         |
| 278 | A Survey of Concurrency Control Algorithms in Collaborative Applications. Lecture Notes on Data Engineering and Communications Technologies, 2023, , 309-320. | 0.7 | 0         |
| 279 | Secure and resilient data replication for the client-centric decentralized web. , 2022, , .   |     | 0         |
| 280 | Secure replication for client-centric data stores. , 2022, , .  |     | 3         |
| 281 | Database Consistency Models. , 2022, , 1-12.  |     | 0         |
| 282 | OrderlessFL. , 2022, , .  |     | 3         |
| 283 | Reversible conflict-free replicated data types. , 2022, , .   |     | 1         |
| 284 | OrderlessFile. , 2022, , .  |     | 2         |
| 285 | OrderlessChain. , 2022, , .   |     | 4         |



| #   | ARTICLE  | IF   | CITATIONS |
|-----|--|------|-----------|
| 286 | AS-cast: Lock Down the Traffic of Decentralized Content Indexing at the Edge. Lecture Notes in Computer Science, 2023, , 433-454.                                  | 1.3  | 0         |
| 287 | BeauForT: Robust Byzantine Fault Tolerance for Client-Centric Mobile Web Applications. IEEE Transactions on Parallel and Distributed Systems, 2023, 34, 1241-1252. | 5.6  | 2         |
| 288 | Model-checking driven explorative testing of CRDT designs and implementations. Journal of Software: Evolution and Process, 2024, 36, .                             | 1.6  | 0         |
| 289 | Cross-Platform Real-Time Collaborative Modeling: An Architecture and a Prototype Implementation via EMF.Cloud. IEEE Access, 2023, 11, 49241-49260.                 | 4.2  | 4         |
| 290 | Permissionless and asynchronous asset transfer. Distributed Computing, 0, , .  | 0.8  | 0         |
| 291 | AMC: Towards Trustworthy and Explorable CRDT Applications with the Automerge Model Checker. , 2023, , .  |      | 0         |
| 292 | A Study of Semantics for CRDT-based Collaborative Spreadsheets. , 2023, , .  |      | 0         |
| 293 | Probabilistic Causal Contexts for Scalable CRDTs. , 2023, , .  |      | 0         |
| 294 | On Extend-Only Directed Posets and Derived Byzantine-Tolerant Replicated Data Types. , 2023, , .   |      | 0         |
| 295 | For-Each Operations in Collaborative Apps. , 2023, , .   |      | 1         |
| 296 | GeoGauss: Strongly Consistent and Light-Coordinated OLTP for Geo-Replicated SQL Database. , 2023, 1, 1-27.   |      | 0         |
| 297 | Synchronizing Many Filesystems in Near Linear Time. Future Internet, 2023, 15, 198.  | 3.8  | 1         |
| 298 | Type-Checking CRDT Convergence. , 2023, 7, 1365-1388.  |      | 2         |
| 299 | A Model and Survey of Distributed Data-Intensive Systems. ACM Computing Surveys, 2024, 56, 1-69.   | 23.0 | 0         |
| 300 | CFS: Scaling Metadata Service for Distributed File System via Pruned Scope of Critical Sections. , 2023, , .   |      | 0         |
| 301 | Attacks on tomorrow's virtual world. , 2023, , .   |      | 0         |
| 302 | Reality-based UTXO Ledger. , 2023, 2, 1-33.  |      | 1         |
| 303 | General-Purpose Secure Conflict-free Replicated Data Types. , 2023, , .  |      | 1         |

| #   | ARTICLE  | IF  | CITATIONS |
|-----|--|-----|-----------|
| 304 | Eventually-Consistent Replicated Relations and Updatable Views. Communications in Computer and Information Science, 2023, , 187-196.   | 0.5 | 0         |
| 305 | Transactional-Turn Causal Consistency. Lecture Notes in Computer Science, 2023, , 578-591.   | 1.3 | 0         |
| 306 | App-Based Operation of a Control Room Setup: The LeitstandsApp of the CELSIUZ. , 2023, , .   |     | 0         |
| 307 | Secure RDTs: Enforcing Access Control Policies for Offline Available JSON Data. , 2023, 7, 146-172.  |     | 0         |
| 308 | Better Predicates and Heuristics for Improved Commutativity Synthesis. Lecture Notes in Computer Science, 2023, , 93-113.  | 1.3 | 0         |
| 309 | Hydis: A Hybrid Consistent KVS with Effective Sync Among Replicas. Lecture Notes in Computer Science, 2024, , 147-161.   | 1.3 | 0         |
| 310 | Offline Collaboration Tool utilizing WebRTC in Ad Hoc Peer-to-Peer Networks. , 2023, , .   |     | 0         |
| 311 | Collaboration And Versioning Framework – A Systematic Top-Down Approach. , 2023, , .   |     | 0         |
| 312 | Ad Hoc Transactions through the Looking Glass: An Empirical Study of Application-Level Transactions in Web Applications. ACM Transactions on Database Systems, 2024, 49, 1-43. | 2.8 | 0         |
| 313 | RAGraph: A Region-Aware Framework for Geo-Distributed Graph Processing. Proceedings of the VLDB Endowment, 2023, 17, 264-277.  | 3.8 | 0         |
| 314 | Designing Peer-to-Peer Systems as Closed Knowledge Commons. , 2023, , .  |     | 0         |
| 315 | Quantifying the Performance of Conflict-free Replicated Data Types in InterPlanetary File System. , 2023, , .  |     | 0         |
| 316 | Understanding Real-Time Collaborative Programming: A Study of Visual Studio Live Share. ACM Transactions on Software Engineering and Methodology, 2024, 33, 1-28.              | 6.0 | 0         |
| 317 | Bridging Between Active Objects: Multitier Programming for Distributed, Concurrent Systems. Lecture Notes in Computer Science, 2024, , 92-122.                                 | 1.3 | 0         |