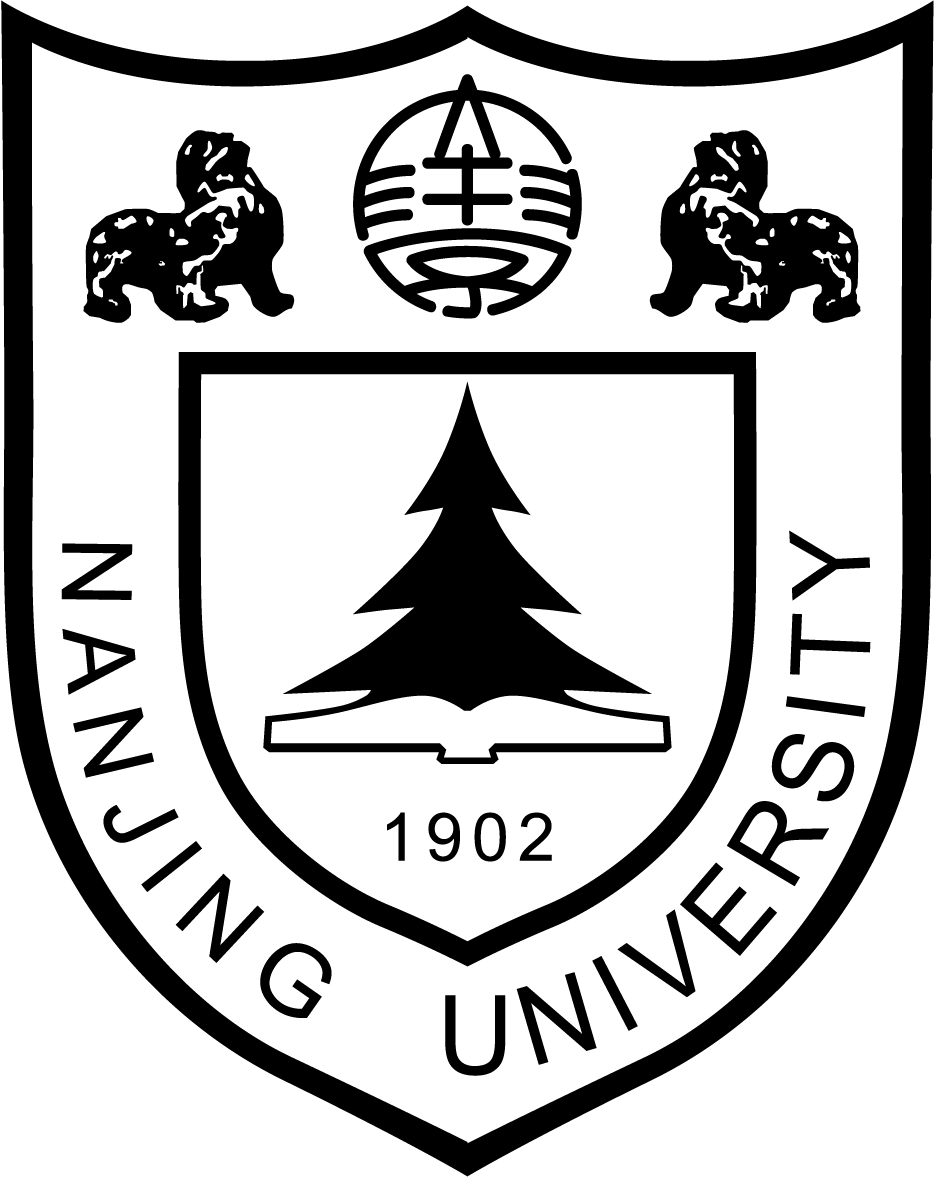
报告编号：25-0190



教育部科技查新工作站（南京大学）

文献检索报告

本部于2025年03月09日受理南京大学软件学院 魏恒峰的委托，检索其送检的27篇研究论文被EI、SCIE、CPCI-S、CSCD收录，被WOS、CSCD引用及期刊影响因子、分区的情况。

检索类别：收录、引用、期刊影响因子、分区

检索方式：机检

检索范围：国内、国外

检索工具：

EI（Ei Compendex Web 1969-至今）

SCIE（SCI-EXPANDED 1900-至今）

CPCI-S（Conference Proceedings Citation Index - Science 1900-至今）

CSCD（中国科学引文数据库）

Journal of Citation Index（1997~2023）

检索时限：2012-至今

检索结果：

魏恒峰的论文被EI收录24篇；

魏恒峰的论文被SCIE收录8篇；

魏恒峰的论文被CPCI-S收录11篇；

魏恒峰的论文被CSCD收录3篇；

魏恒峰的论文被WOS引用63篇次（其中他引53篇次）；

魏恒峰的论文被CSCD引用6篇次（其中他引4篇次）。

检索结果附后。

他引的定义是：除被检索作者以外其他的人引用。

教育部科技查新工作站（南京大学）

2025年03月10日

一、魏恒峰的发表期刊影响因子、分区情况

|  |  |  |  |
| --- | --- | --- | --- |
| 序号 | 篇名 | 刊名 | 影响因子 |
| 1 | Model-checking-driven explorative testing of CRDT designs and implementations | JOURNAL OF SOFTWARE-EVOLUTION AND PROCESS | 1.7(2023) |
| 类别 | | 分区 |
| COMPUTER SCIENCE, SOFTWARE ENGINEERING(SCIE) | | Q3 |
| 2 | IsoVista: Black-box Checking Database Isolation Guarantees | PROCEEDINGS OF THE VLDB ENDOWMENT | 2.6(2023) |
| 类别 | | 分区 |
| COMPUTER SCIENCE, INFORMATION SYSTEMS(SCIE) | | Q2 |
| COMPUTER SCIENCE, THEORY & METHODS(SCIE) | | Q2 |
| 3 | Efficient Black-box Checking of Snapshot Isolation in Databases | PROCEEDINGS OF THE VLDB ENDOWMENT | 2.6(2023) |
| 类别 | | 分区 |
| COMPUTER SCIENCE, INFORMATION SYSTEMS(SCIE) | | Q2 |
| COMPUTER SCIENCE, THEORY & METHODS(SCIE) | | Q2 |
| 4 | Checking Causal Consistency of MongoDB | JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY | 1.9(2022) |
| 类别 | | 分区 |
| COMPUTER SCIENCE, HARDWARE & ARCHITECTURE(SCIE) | | Q3 |
| COMPUTER SCIENCE, SOFTWARE ENGINEERING(SCIE) | | Q3 |
| 5 | Achieving Probabilistic Atomicity With Well-Bounded Staleness and Low Read Latency in Distributed Datastores | IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS | 3.757(2021) |
| 类别 | | 分区 |
| COMPUTER SCIENCE, THEORY & METHODS(SCIE) | | Q1 |
| ENGINEERING, ELECTRICAL & ELECTRONIC(SCIE) | | Q2 |
| 6 | Jupiter Made Abstract, and Then Refined | JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY | 1.571(2020) |
| 类别 | | 分区 |
| COMPUTER SCIENCE, SOFTWARE ENGINEERING(SCIE) | | Q3 |
| COMPUTER SCIENCE, HARDWARE & ARCHITECTURE(SCIE) | | Q3 |
| 7 | Probabilistically-Atomic 2-Atomicity: Enabling Almost Strong Consistency in Distributed Storage Systems | IEEE TRANSACTIONS ON COMPUTERS | 3.052(2017) |
| 类别 | | 分区 |
| COMPUTER SCIENCE, HARDWARE & ARCHITECTURE(SCIE) | | Q1 |
| ENGINEERING, ELECTRICAL & ELECTRONIC(SCIE) | | Q1 |
| 8 | Verifying Pipelined-RAM Consistency over Read/Write Traces of Data Replicas | IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS | 4.181(2016) |
| 类别 | | 分区 |
| COMPUTER SCIENCE, THEORY & METHODS(SCIE) | | Q1 |
| ENGINEERING, ELECTRICAL & ELECTRONIC(SCIE) | | Q1 |

二、魏恒峰的研究论文被EI收录情况

<RECORD 1>

Accession number:20250517788762

Title:A Generic Specification Framework for Weakly Consistent Replicated Data Types

Authors:Jiang, Xue;Wei, Hengfeng;Huang, Yu;Chen, Yuxing;Pan, Anqun

Author affiliation:[Jiang, Xue;Wei, Hengfeng;Huang, Yu] Nanjing University, State Key Laboratory for Novel Software Technology, China [Jiang, Xue] Zhejiang International Maritime College, School of Navigation Engineering, China [Chen, Yuxing;Pan, Anqun] Tencent Inc., China

Corresponding author:Wei, Hengfeng

Source title:IEEE Transactions on Parallel and Distributed Systems

Abbreviated source title:IEEE Trans Parallel Distrib Syst

Issue date:2025

Publication year:2025

Language:English

ISSN:10459219

E-ISSN:15582183

CODEN:ITDSEO

Document type:Article in Press

Publisher:IEEE Computer Society

Abstract:Burckhardt et al. proposed a formal specification framework for eventually consistent replicated data types, denoted (vis, ar), based on the notions of visibility and arbitration relations. However, being specific to eventually consistent systems, this framework has two limitations. First, it does not cover non-convergent consistency models since arbitration ar is a total order over events. Second, it does not cover the consistency models in which each event is required to be aware of the return values of some events that are visible to it when justifying its return value. These limitations make the (vis, ar) framework not generic enough to specify and reason about important weak consistency models such as Causal Memory and PRAM. In this paper, we extend this framework to a more generic one called (vis, ar, V) for weakly consistent replicated data types. To specify non-convergent consistency models as well, we relax the arbitration relation ar to be a partial order. To overcome the second limitation, we allow to specify for each event e, a subset V(e) of its visible set whose return values cannot be ignored when justifying the return value of e. To make it practically feasible, we provide candidates for the visibility and arbitration relations and the V function. By combining candidates for these three components, we are able to specify not only existing consistency models but also new ones that are reasonable and promising for practical usefulness. We then show how to specify consistency models in our framework, and provide three case studies. ? 2025 IEEE.

Number of references:35

Main heading:Spatio-temporal data

DOI:10.1109/TPDS.2025.3533546

Database:Compendex

Classification code:1106.4 Database Systems

<RECORD 2>

Accession number:20231313800178

Title:Model-checking-driven explorative testing of CRDT designs and implementations

Authors:Zhang, Yuqi;Huang, Yu;Wei, Hengfeng;Ma, Xiaoxing

Author affiliation:[Zhang, Yuqi;Huang, Yu;Wei, Hengfeng;Ma, Xiaoxing] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing, China

Corresponding author:Huang, Yu(yuhuang@nju.edu.cn)

Source title:Journal of Software: Evolution and Process

Abbreviated source title:J. Softw. Evol. Process

Volume:36

Issue:4

Issue date:April 2024

Publication year:2024

Language:English

ISSN:20477481

E-ISSN:20477481

Document type:Journal article (JA)

Publisher:John Wiley and Sons Ltd

Abstract:Internet-scale distributed systems often replicate data at multiple geographic locations to provide low latency and high availability, despite node and network failures. According to the CAP theorem, low latency and high availability can only be achieved at the cost of accepting weak consistency. The conflict-free replicated data type (CRDT) is a framework that provides a principled approach to maintaining eventual consistency among data replicas. CRDTs have been notoriously difficult to design and implement correctly. Subtle deep bugs lie in the complex and tedious handling of all possible cases of conflicting data updates. We argue that the CRDT design should be formally specified and model checked, to uncover deep bugs which are beyond human reasoning. The implementation further needs to be systematically tested. On the one hand, the testing needs to inherit the exhaustive nature of the model checking and ensures the coverage of testing. On the other hand, the testing is expected to find coding errors which cannot be detected by design level verification. Toward the challenges above, we propose the model-checking-driven explorative testing (MET) framework. At the design level, MET uses TLA+ to specify and model check CRDT designs. At the implementation level, MET conducts model-checking-driven explorative testing, in the sense that the test cases are automatically generated from the model-checking traces. The system execution is controlled to proceed deterministically, following the model-checking trace. The explorative testing systematically controls and permutes all nondeterministic choices of message reorderings. We apply MET in our practical development of CRDTs. The bugs in both designs and implementations of CRDTs are found. As for bugs which can be found by traditional testing techniques, MET greatly reduces the cost of fixing the bugs. Moreover, MET can find subtle deep bugs which cannot be found by existing techniques at a reasonable cost. Based on our practical use of MET, we discuss how MET provides us with sufficient confidence in the correctness of our CRDT designs and implementations. Conflict-free replicated data type (CRDT) is a framework that provides a principled approach to maintaining eventual consistency among data replicas in distributed systems. CRDTs have been notoriously difficult to design and implement correctly. We propose model-checking-driven explorative testing (MET) framework for dealing with such problem. We apply MET in our practical development of CRDTs. MET successfully finds subtle deep bugs and provides us with sufficient confidence in the correctness of our CRDT designs and implementations. ? 2023 John Wiley & Sons Ltd.

Number of references:59

Main heading:Model checking

DOI:10.1002/smr.2555

Database:Compendex

Classification code:721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory

Article number:e2555

<RECORD 3>

Accession number:20244017138642

Title:IsoVista: Black-box Checking Database Isolation Guarantees

Authors:Gu, Long;Liu, Si;Xing, Tiancheng;Wei, Hengfeng;Chen, Yuxing;Basin, David

Author affiliation:[Gu, Long;Xing, Tiancheng;Wei, Hengfeng] State Key Laboratory for Novel Software Technology, Nanjing University, China [Liu, Si;Basin, David] ETH Zurich, Switzerland [Chen, Yuxing] Tencent Inc, China

Source title:Proceedings of the VLDB Endowment

Abbreviated source title:Proc. VLDB Endow.

Volume:17

Issue:12

Issue date:2024

Publication year:2024

Pages:4325

Language:English

ISSN:21508097

E-ISSN:21508097

Document type:Conference article (CA)

Publisher:VLDB Endowment

Abstract:Transactional isolation is critical to the functional correctness of database management systems (DBMSs). Much effort has recently been devoted to finding isolation bugs and validating isolation fulfilment in production DBMSs. However, there are still challenges that existing isolation checkers have not yet fully addressed. For instance, they may overlook bugs, incur high checking overhead, and return hard-to-understand counterexamples. We present IsoVista, the first black-box isolation checking system that encompasses all the following features. It builds on faithful characterizations of a range of isolation levels, ensuring the absence of both false positives and missed bugs in collected DBMS execution histories. IsoVista exhibits superior checking efficiency, compared to the state-of-the-art, and visualizes violation scenarios, facilitating the understanding of bugs found. It also supports profiling and benchmarking the performance of isolation checkers under various workloads, assisting developers of both DBMSs and checkers. We showcase all these features through user-friendly interfaces. ? 2024, VLDB Endowment. All rights reserved.

Number of references:9

Main heading:User interfaces

Controlled terms:Benchmarking - Black-box testing - Database systems

DOI:10.14778/3685800.3685866

Database:Compendex

Classification code:1103.2 Computer Peripheral Equipment - 1106.4 Database Systems - 1106.5 Computer Applications - 913.3 Quality Assurance and Control

Conference name:50th International Conference on Very Large Data Bases, VLDB 2024

Conference date:August 24, 2024 - August 29, 2024

Conference location:Guangzhou, China

Conference code:306059

<RECORD 4>

Accession number:20244317248494

Title:Plume: Efficient and Complete Black-Box Checking of Weak Isolation Levels

Authors:Liu, Si;Gu, Long;Wei, Hengfeng;Basin, David

Author affiliation:[Liu, Si;Basin, David] Eth Zurich, Zurich, Switzerland [Gu, Long;Wei, Hengfeng] State Key Laboratory for Novel Software Technology, Nanjing University, China

Corresponding author:Wei, Hengfeng(hfwei@nju.edu.cn)

Source title:Proceedings of the ACM on Programming Languages

Abbreviated source title:Proc. ACM Program. Lang.

Volume:8

Issue:OOPSLA2

Issue date:October 8, 2024

Publication year:2024

Language:English

ISSN:24751421

E-ISSN:24751421

Document type:Journal article (JA)

Publisher:Association for Computing Machinery

Abstract:Modern databases embrace weak isolation levels to cater for highly available transactions. However, weak isolation bugs have recently manifested in many production databases. This raises the concern of whether database implementations actually deliver their promised isolation guarantees in practice. In this paper we present Plume, the first efficient, complete, black-box checker for weak isolation levels. Plume builds on modular, fine-grained, transactional anomalous patterns, with which we establish sound and complete characterizations of representative weak isolation levels, including read committed, read atomicity, and transactional causal consistency. Plume leverages a novel combination of two techniques, vectors and tree clocks, to accelerate isolation checking. Our extensive assessment shows that Plume can reproduce all known violations in a large collection of anomalous database execution histories, detect new isolation bugs in three production databases along with informative counterexamples, find more weak isolation anomalies than the state-of-the-art checkers, and efficiently validate isolation guarantees under a wide variety of workloads. ? 2024 Owner/Author.

Number of references:67

Main heading:Black-box testing

Controlled terms:Database systems - Formal specification

DOI:10.1145/3689742

Database:Compendex

Classification code:1106.4 Database Systems - 1106.5 Computer Applications

Article number:302

<RECORD 5>

Accession number:20245117564309

Title:LLM Meets Bounded Model Checking: Neuro-symbolic Loop Invariant Inference

Authors:Wu, Guangyuan;Cao, Weining;Yao, Yuan;Wei, Hengfeng;Chen, Taolue;Ma, Xiaoxing

Author affiliation:[Wu, Guangyuan;Cao, Weining;Yao, Yuan;Wei, Hengfeng;Ma, Xiaoxing] State Key Laboratory for Novel Software Technology, Nanjing University, China [Chen, Taolue] School of Computing and Mathematical Sciences, Birkbeck, University of London, United Kingdom

Source title:Proceedings - 2024 39th ACM/IEEE International Conference on Automated Software Engineering, ASE 2024

Abbreviated source title:Proc. - ACM/IEEE Int. Conf. Autom. Softw. Eng., ASE

Issue date:October 27, 2024

Publication year:2024

Pages:406

Language:English

ISBN-13:9798400712487

Document type:Conference article (CA)

Publisher:Association for Computing Machinery, Inc

Abstract:Loop invariant inference, a key component in program verification, is a challenging task due to the inherent undecidability and complex loop behaviors in practice. Recently, machine learning based techniques have demonstrated impressive performance in generating loop invariants automatically. However, these methods highly rely on the labeled training data, and are intrinsically random and uncertain, leading to unstable performance. In this paper, we investigate a synergy of large language models (LLMs) and bounded model checking (BMC) to address these issues. The key observation is that, although LLMs may not be able to return the correct loop invariant in one response, they usually can provide all individual predicates of the correct loop invariant in multiple responses. To this end, we propose a \"query-filter-reassemble\"strategy, namely, we first leverage the language generation power of LLMs to produce a set of candidate invariants, where training data is not needed. Then, we employ BMC to identify valid predicates from these candidate invariants, which are assembled to produce new candidate invariants and checked by off-the-shelf SMT solvers. The feedback is incorporated into the prompt for the next round of LLM querying. We expand the existing benchmark of 133 programs to 316 programs, providing a more comprehensive testing ground. Experimental results demonstrate that our approach significantly outperforms the state-of-the-art techniques, successfully generating 309 loop invariants out of 316 cases, whereas the existing baseline methods are only able to tackle 219 programs at best. The code is publicly available at https://github.com/SoftWiser-group/LaM4Inv.git. ? 2024 Copyright is held by the owner/author(s). Publication rights licensed to ACM.

Number of references:55

Controlled terms:Inference engines - Learning systems - Model checking - Query languages - Software testing - Structured Query Language

DOI:10.1145/3691620.3695014

Database:Compendex

Classification code:1101.1 Expert Systems - 1101.2 Machine Learning - 1102.1 Computer Theory, Includes Computational Logic, Automata Theory, Switching Theory, Programming Theory - 1106.1.1 Computer Programming Languages - 1106.4 Database Systems - 1106.9 Computer Software

Conference name:39th ACM/IEEE International Conference on Automated Software Engineering, ASE 2024

Conference date:October 28, 2024 - November 1, 2024

Conference location:Sacramento, CA, United states

Conference code:204421

<RECORD 6>

Accession number:20231713946792

Title:Tunable Causal Consistency: Specification and Implementation????(Open Access)

Authors:Jiang, Xue;Wei, Hengfeng;Huang, Yu

Author affiliation:[Jiang, Xue;Wei, Hengfeng;Huang, Yu] Nanjing University, State Key Laboratory for Novel Software Technology, China

Corresponding author:Wei, Hengfeng(hfwei@nju.edu.cn)

Source title:Proceedings of the International Conference on Parallel and Distributed Systems - ICPADS

Abbreviated source title:Proc Int Conf Parallel Distrib Syst ICPADS

Volume:2023-January

Issue date:2023

Publication year:2023

Pages:169

Language:English

ISSN:15219097

ISBN-13:9781665473156

CODEN:PIPSFH

Document type:Conference article (CA)

Publisher:IEEE Computer Society

Abstract:To achieve high availability and low latency, dis-tributed data stores often geographically replicate data at multiple sites called replicas. However, this introduces the data consistency problem. Due to the fundamental tradeoffs among consistency, availability, and latency in the presence of network partition, no a one-size-fits-all consistency model exists. To meet the needs of different applications, many popular data stores provide tunable consistency, allowing clients to specify the consistency level per individual operation. In this paper, we propose tunable causal consistency (TCC). It allows clients to choose the desired session guarantee for each operation, from the well-known four session guarantees, i.e., read your writes, monotonic reads, monotonic writes, and writes follow reads. Specifically, we first propose a formal specffication of TCC in an extended (vis, ar) framework originally proposed by Burckhardt et al. Then we design a TCC protocol and develop a prototype distributed key-value store called TCCSTORE. We evaluate TCCSTORE on Aliyun. The latency is less than 38ms for all workloads and the throughput is up to about 1900 operations per second. We also show that TCC achieves better performance than causal consistency and requires a negligible overhead when compared with eventual consistency. ? 2023 IEEE.

Number of references:31

DOI:10.1109/ICPADS56603.2022.00030

Database:Compendex

Conference name:28th IEEE International Conference on Parallel and Distributed Systems, ICPADS 2022

Conference date:January 10, 2023 - January 12, 2023

Conference location:Nanjing, China

Conference code:187606

<RECORD 7>

Accession number:20230024047

Title:Efficient Black-box Checking of Snapshot Isolation in Databases

Authors:Huang, Kaile;Liu, Si;Chen, Zhenge;Wei, Hengfeng;Basin, David;Li, Haixiang;Pan, Anqun

Author affiliation:[Huang, Kaile] State Key Laboratory for Novel, Software Technology, Nanjing University, China [Liu, Si;Basin, David] ETH Zurich, Switzerland [Chen, Zhenge;Wei, Hengfeng] State Key Laboratory for Novel, Software Technology, Software Institute, Nanjing University, China [Li, Haixiang;Pan, Anqun] Tencent Inc., China

Corresponding author:Wei, Hengfeng

Source title:arXiv

Abbreviated source title:arXiv

Issue date:January 18, 2023

Publication year:2023

Language:English

ISSN:23318422

E-ISSN:23318422

Document type:Preprint (PP)

Abstract:Snapshot isolation (SI) is a prevalent weak isolation level that avoids the performance penalty imposed by serializability and simultaneously prevents various undesired data anomalies. Nevertheless, SI anomalies have recently been found in production cloud databases that claim to provide the SI guarantee. Given the complex and often unavailable internals of such databases, a black-box SI checker is highly desirable. In this paper we present PolySI, a novel black-box checker that efficiently checks SI and provides understandable counterexamples upon detecting violations. PolySI builds on a novel characterization of SI using generalized polygraphs (GPs), for which we establish its soundness and completeness. PolySI employs an SMT solver and also accelerates SMT solving by utilizing the compact constraint encoding of GPs and domain-specific optimizations for pruning constraints. As demonstrated by our extensive assessment, PolySI successfully reproduces all of 2477 known SI anomalies, detects novel SI violations in three production cloud databases, identifies their causes, outperforms the state-of-the-art black-box checkers under a wide range of workloads, and can scale up to large-sized workloads. ? 2023, CC BY.

Number of references:54

Main heading:Database systems

DOI:10.48550/arXiv.2301.07313

Database:Compendex

Classification code:723.3 Database Systems

<RECORD 8>

Accession number:20220911728560

Title:Checking Causal Consistency of MongoDB

Authors:Ouyang, Hong-Rong;Wei, Heng-Feng;Li, Hai-Xiang;Pan, An-Qun;Huang, Yu

Author affiliation:[Ouyang, Hong-Rong;Wei, Heng-Feng;Huang, Yu] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing 210023, China [Wei, Heng-Feng] Software Institute, Nanjing University, Nanjing 210093, China [Li, Hai-Xiang;Pan, An-Qun] Tencent Distributed SQL Team of Technology and Engineering Group of Tencent, Tencent Inc., Shenzhen 518054, China

Source title:Journal of Computer Science and Technology

Abbreviated source title:J Comput Sci Technol

Volume:37

Issue:1

Issue date:February 2022

Publication year:2022

Pages:128

Language:English

ISSN:10009000

E-ISSN:18604749

CODEN:JCTEEM

Document type:Journal article (JA)

Publisher:Springer

Abstract:MongoDB is one of the first commercial distributed databases that support causal consistency. Its implementation of causal consistency combines several research ideas for achieving scalability, fault tolerance, and security. Given its inherent complexity, a natural question arises: \"Has MongoDB correctly implemented causal consistency as it claimed?\" To address this concern, the Jepsen team has conducted black-box testing of MongoDB. However, this Jepsen testing has several drawbacks in terms of specification, test case generation, implementation of causal consistency checking algorithms, and testing scenarios, which undermine the credibility of its reports. In this work, we propose a more thorough design of Jepsen testing of causal consistency of MongoDB. Specifically, we fully implement the causal consistency checking algorithms proposed by Bouajjani et al. and test MongoDB against three well-known variants of causal consistency, namely CC, CCv, and CM, under various scenarios including node failures, data movement, and network partitions. In addition, we develop formal specifications of causal consistency and their checking algorithms in TLA+, and verify them using the TLC model checker. We also explain how TLA+ specification can be related to Jepsen testing. ? 2022, Institute of Computing Technology, Chinese Academy of Sciences.

Number of references:29

Main heading:Fault tolerance

Controlled terms:Black-box testing - Model checking - Formal specification

DOI:10.1007/s11390-021-1662-8

Database:Compendex

Classification code:721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 723.5 Computer Applications

<RECORD 9>

Accession number:20224212894279

Title:Incremental Causal Consistency Checking for Read-Write Memory Histories

Authors:Huang, Yi;Wei, Hengfeng

Author affiliation:[Huang, Yi] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing, China [Wei, Hengfeng] State Key Laboratory for Novel Software Technology, Software Institute, Nanjing University, Nanjing, China

Source title:ACM International Conference Proceeding Series

Abbreviated source title:ACM Int. Conf. Proc. Ser.

Issue date:June 11, 2022

Publication year:2022

Pages:181

Language:English

ISBN-13:9781450397803

Document type:Conference article (CA)

Publisher:Association for Computing Machinery

Abstract:Causal consistency is one of the strongest consistency models that can be implemented to ensure availability under network partition in distributed systems. The problem of causal consistency checking asks whether a given history of some system is causally consistent. Recently Bouajjani et al. showed that for read-write memory histories in which writes assign unique values to each variable, this can be solved in polynomial time. The algorithm searches for bad patterns of causal consistency, which are defined using various relations derived from history. However, the high time complexity of the algorithm makes it not so practical. In this paper, we show how to improve this checking algorithm by incrementally computing the relations underlying the bad patterns. We also demonstrate its efficiency by conducting experiments on both random histories and those generated by MongoDB. ? 2022 Association for Computing Machinery.

Number of references:20

Main heading:Computational complexity

Controlled terms:Polynomial approximation

DOI:10.1145/3545258.3545262

Database:Compendex

Classification code:721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 921.6 Numerical Methods

Conference name:13th Asia-Pacific Symposium on Internetware, Internetware 2022

Conference date:June 11, 2022 - June 12, 2022

Conference location:Virtual, Online, China

Conference code:182765

<RECORD 10>

Accession number:20204809549541

Title:Achieving Probabilistic Atomicity with Well-Bounded Staleness and Low Read Latency in Distributed Datastores????(Open Access)

Authors:Ouyang, Lingzhi;Huang, Yu;Wei, Hengfeng;Lu, Jian

Author affiliation:[Ouyang, Lingzhi;Huang, Yu;Wei, Hengfeng;Lu, Jian] Department of Computer Science and Technology, State Key Laboratory for Novel Software Technology, Nanjing University, China

Corresponding author:Huang, Yu(yuhuang@nju.edu.cn)

Source title:IEEE Transactions on Parallel and Distributed Systems

Abbreviated source title:IEEE Trans Parallel Distrib Syst

Volume:32

Issue:4

Issue date:April 1, 2021

Publication year:2021

Pages:815

Language:English

ISSN:10459219

E-ISSN:15582183

CODEN:ITDSEO

Document type:Journal article (JA)

Publisher:IEEE Computer Society

Abstract:Although it has been commercially successful to deploy weakly consistent but highly-responsive distributed datastores, the tension between developing complex applications and obtaining only weak consistency guarantees becomes more and more severe. The almost strong consistency tradeoff aims at achieving both strong consistency and low latency in the common case. In distributed storage systems, we investigate the generic notion of almost strong consistency in terms of designing fast read algorithms while guaranteeing Probabilistic Atomicity with well-Bounded staleness (PAB). This problem has been explored in the case where only one client can write the data. However, the more general case where multiple clients can write the data has not been studied. In this article, we study the fast read algorithm for PAB in the multi-writer case. We show the bound of data staleness and the probability of atomicity violation by decomposing inconsistent reads into the read inversion and the write inversion patterns. We implement the fast read algorithm and evaluate the consistency-latency tradeoffs based on the instrumentation of Cassandra and the YCSB benchmark framework. The theoretical analysis and the experimental evaluations show that our fast read algorithm guarantees PAB, even when faced with dynamic changes in the computing environment. ? 1990-2012 IEEE.

Number of references:68

Main heading:Digital storage

Controlled terms:Multiprocessing systems

DOI:10.1109/TPDS.2020.3034328

Database:Compendex

Classification code:722.1 Data Storage, Equipment and Techniques - 722.4 Digital Computers and Systems

Article number:9242251

<RECORD 11>

Accession number:20213210724902

Title:UNISTORE: A fault-tolerant marriage of causal and strong consistency

Authors:Bravo, Manuel;Gotsman, Alexey;De R&eacute;gil, Borja;Wei, Hengfeng

Author affiliation:[Bravo, Manuel;Gotsman, Alexey;gil, Borja] IMDEA Software Institute [Wei, Hengfeng] Nanjing University, China

Source title:2021 USENIX Annual Technical Conference

Abbreviated source title:USENIX Annu. Tech. Conf.

Issue date:2021

Publication year:2021

Pages:923

Language:English

ISBN-13:9781939133236

Document type:Conference article (CA)

Publisher:USENIX Association

Abstract:Modern online services rely on data stores that replicate their data across geographically distributed data centers. Providing strong consistency in such data stores results in high latencies and makes the system vulnerable to network partitions. The alternative of relaxing consistency violates crucial correctness properties. A compromise is to allow multiple consistency levels to coexist in the data store. In this paper we present UNISTORE, the first fault-tolerant and scalable data store that combines causal and strong consistency. The key challenge we address in UNISTORE is to maintain liveness despite data center failures: this could be compromised if a strong transaction takes a dependency on a causal transaction that is later lost because of a failure. UNISTORE ensures that such situations do not arise while paying the cost of durability for causal transactions only when necessary. We evaluate UNISTORE on Amazon EC2 using both microbenchmarks and a sample application. Our results show that UNISTORE effectively and scalably combines causal and strong consistency. ? 2021 USENIX Annual Technical Conference. All rights reserved.

Number of references:73

Database:Compendex

Conference name:2021 USENIX Annual Technical Conference, ATC 2021

Conference date:July 14, 2021 - July 16, 2021

Conference location:Virtual, Online

Conference code:170531

<RECORD 12>

Accession number:20222012110497

Title:Remove-Win: a Design Framework for Conflict-free Replicated Data Types????(Open Access)

Authors:Zhang, Yuqi;Wei, Hengfeng;Huang, Yu

Author affiliation:[Zhang, Yuqi;Wei, Hengfeng;Huang, Yu] Nanjing University, National Key Laboratory for Novel Software Technology, Jiangsu Province, Nanjing 210023, China

Source title:Proceedings of the International Conference on Parallel and Distributed Systems - ICPADS

Abbreviated source title:Proc Int Conf Parallel Distrib Syst ICPADS

Volume:2021-December

Issue date:2021

Publication year:2021

Pages:607

Language:English

ISSN:15219097

ISBN-13:9781665408783

CODEN:PIPSFH

Document type:Conference article (CA)

Publisher:IEEE Computer Society

Abstract:Distributed storage systems employ replication to improve performance and reliability. To provide low latency data access, replicas are often required to accept updates without coordination with each other, and the updates are then propagated asynchronously. This brings the critical challenge of conflict resolution among concurrent updates. Conflict-free Replicated Data Type (CRDT) is a principled approach to addressing this challenge. However, existing CRDT designs are tricky, and hard to be generalized to other data types. A design framework is in great need to guide the systematic design of new CRDTs. To address this challenge, we propose RWF - the Remove-Win design Framewerk for CRDTs. RWF leverages the simple but powerful remove-win strategy to resolve conflicting updates, and provides generic design for a variety of data container types. Two exemplar implementations following RWF are given over the Redis data type store, which demonstrate the effectiveness of RWF. Performance measurements of our implementations further show the efficiency of CRDT designs following RWF. ? 2021 IEEE.

Number of references:19

Main heading:Multiprocessing systems

Controlled terms:Digital storage

DOI:10.1109/ICPADS53394.2021.00081

Database:Compendex

Classification code:722.1 Data Storage, Equipment and Techniques - 722.4 Digital Computers and Systems

Conference name:27th IEEE International Conference on Parallel and Distributed Systems, ICPADS 2021

Conference date:December 14, 2021 - December 16, 2021

Conference location:Beijing, China

Conference code:179112

<RECORD 13>

Accession number:20203709158744

Title:Fine-grained Analysis on Fast Implementations of Distributed Multi-writer Atomic Registers????(Open Access)

Authors:Huang, Kaile;Huang, Yu;Wei, Hengfeng

Author affiliation:[Huang, Kaile;Huang, Yu;Wei, Hengfeng] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing, Jiangsu Province, China

Source title:Proceedings of the Annual ACM Symposium on Principles of Distributed Computing

Abbreviated source title:Proc Annu ACM Symp Princ Distrib Comput

Issue date:July 31, 2020

Publication year:2020

Pages:200

Language:English

ISBN-13:9781450375825

CODEN:85LRAZ

Document type:Conference article (CA)

Publisher:Association for Computing Machinery

Abstract:Distributed multi-writer atomic registers are at the heart of a large number of distributed algorithms. While enjoying the benefits of atomicity, researchers further explore fast implementations of atomic reigsters which are optimal in terms of data access latency. Though it is proved that multi-writer atomic register implementations are impossible when both read and write are required to be fast, it is still open whether implementations are impossible when only write or read is required to be fast. This work proves the impossibility of fast write implementations based on a series of chain arguments among indistiguishable executions. We also show the necessary and sufficient condition for fast read implementations by extending the results in the single-writer case. This work concludes a series of studies on fast implementations of distributed atomic registers. ? 2020 ACM.

Number of references:28

Main heading:Atoms

DOI:10.1145/3382734.3405698

Database:Compendex

Classification code:931.3 Atomic and Molecular Physics

Conference name:39th Symposium on Principles of Distributed Computing, PODC 2020

Conference date:August 3, 2020 - August 7, 2020

Conference location:Virtual, Online, Italy

Conference code:162056

<RECORD 14>

Accession number:20205109660741

Title:A Generic Specification Framework for Weakly Consistent Replicated Data Types

Authors:Jiang, Xue;Wei, Hengfeng;Huang, Yu

Author affiliation:[Jiang, Xue;Wei, Hengfeng;Huang, Yu] Nanjing University, State Key Laboratory for Novel Software Technology, China

Source title:Proceedings of the IEEE Symposium on Reliable Distributed Systems

Abbreviated source title:Proc IEEE Symp Reliab Distrib Syst

Volume:2020-September

Issue date:September 2020

Publication year:2020

Pages:143

Language:English

ISSN:10609857

ISBN-13:9781728176260

CODEN:PRDSFK

Document type:Conference article (CA)

Publisher:IEEE Computer Society

Abstract:Recently Burckhardt et al. proposed a formal specification framework for eventually consistent replicated data types, denoted (vis, ar), based on the notions of visibility and arbitration relations. However, being specific to eventually consistent systems, this framework has two limitations. First, it does not cover non-convergent consistency models since arbitration ar is defined to be a total order over events in a computation. Second, it does not cover the consistency models in which each event is required to be aware of the return values of some or all events that are visible to it.In this paper, we extend the (vis, ar) specification framework into a more generic one called (vis, ar, V) for weakly consistent replicated data types. To specify non-convergent consistency models as well, we simply relax the arbitration relation ar to be a partial order. To overcome the second limitation, we allow to specify for each event e, a subset V(e) of its visible set whose return values cannot be ignored when justifying the return value of e. To make it practically feasible, we provide candidates for the visibility and arbitration relations and the V function. By combining these candidates, we demonstrate how to specify various existing consistency models in the (vis, ar, V) framework. Moreover, it helps to discover new consistency models. As a case study, we prove that the causal consistency protocol of MongoDB database satisfies Causal Memory Convergence, a new causal consistency variant discovered in our framework. ? 2020 IEEE.

Number of references:27

Main heading:Visibility

Controlled terms:Formal specification

DOI:10.1109/SRDS51746.2020.00022

Database:Compendex

Classification code:723.5 Computer Applications - 741.2 Vision

Conference name:39th International Symposium on Reliable Distributed Systems, SRDS 2020

Conference date:September 21, 2020 - September 24, 2020

Conference location:Virtual, Shanghai, China

Conference code:164987

Article number:9252077

<RECORD 15>

Accession number:20205009598339

Title:Jupiter Made Abstract, and Then Refined

Authors:Wei, Heng-Feng;Tang, Rui-Ze;Huang, Yu;Lv, Jian

Author affiliation:[Wei, Heng-Feng;Tang, Rui-Ze;Huang, Yu;Lv, Jian] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing 210023, China

Corresponding author:Huang, Yu(yuhuang@nju.edu.cn)

Source title:Journal of Computer Science and Technology

Abbreviated source title:J Comput Sci Technol

Volume:35

Issue:6

Issue date:November 2020

Publication year:2020

Pages:1343

Language:English

ISSN:10009000

E-ISSN:18604749

CODEN:JCTEEM

Document type:Journal article (JA)

Publisher:Springer

Abstract:Collaborative text editing systems allow multiple users to concurrently edit the same document, which can be modeled by a replicated list object. In the literature, there is a family of operational transformation (OT)-based Jupiter protocols for replicated lists, including AJupiter, XJupiter, and CJupiter. They are hard to understand due to the subtle OT technique, and little work has been done on formal verification of complete Jupiter protocols. Worse still, they use quite different data structures. It is unclear about how they are related to each other, and it would be laborious to verify each Jupiter protocol separately. In this work, we make contributions towards a better understanding of Jupiter protocols and the relation among them. We first identify the key OT issue in Jupiter and present a generic solution. We summarize several techniques for carrying out the solution, including the data structures to maintain OT results and to guide OTs. Then, we propose an implementation-independent AbsJupiter protocol. Finally, we establish the (data) refinement relation among these Jupiter protocols (AbsJupiter included). We also formally specify and verify the family of Jupiter protocols and the refinement relation among them using TLA+ (TLA stands for \"Temporal Logic of Actions\") and the TLC model checker. To our knowledge, this is the first work to formally specify and verify a family of OT-based Jupiter protocols and the refinement relation among them. It would be helpful to promote a rigorous study of OT-based protocols. ? 2020, Institute of Computing Technology, Chinese Academy of Sciences.

Number of references:25

Main heading:Data structures

Controlled terms:Abstracting - Model checking

DOI:10.1007/s11390-020-0516-0

Database:Compendex

Classification code:721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 723.2 Data Processing and Image Processing - 903.1 Information Sources and Analysis

<RECORD 16>

Accession number:20213210741375

Title:Checking Causal Consistency of MongoDB

Authors:Ouyang, Hongrong;Wei, Hengfeng;Huang, Yu

Author affiliation:[Ouyang, Hongrong;Wei, Hengfeng;Huang, Yu] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing, China

Source title:ACM International Conference Proceeding Series

Abbreviated source title:ACM Int. Conf. Proc. Ser.

Issue date:November 1, 2020

Publication year:2020

Pages:209

Language:English

ISBN-13:9781450388191

Document type:Conference article (CA)

Publisher:Association for Computing Machinery

Abstract:MongoDB is one of the first commercial distributed databases that support causal consistency. Its implementation of causal consistency combines several research ideas for achieving scalability, fault tolerance, and security. Given its inherent complexity, a natural question arises: Has MongoDB correctly implemented causal consistency as it claimed? To address this concern, the Jepsen team has conducted a black-box testing of MongoDB. However, this Jepsen testing has several drawbacks in terms of specification, test case generation, implementation of causal consistency checking algorithms, and testing scenarios, which undermine the credibility of its reports. In this work, we have proposed a more thorough design of Jepsen testing of the causal consistency protocol of MongoDB. Specifically, we have fully implemented the causal consistency checking algorithms proposed by Bouajjani et al. and tested MongoDB under various scenarios against three well-known variants of causal consistency. ? 2020 ACM.

Number of references:34

Main heading:Fault tolerance

DOI:10.1145/3457913.3457928

Database:Compendex

Classification code:723.3 Database Systems - 723.5 Computer Applications

Conference name:12th Asia-Pacific Symposium on Internetware, Internetware\'\'2020

Conference date:May 12, 2021 - May 14, 2021

Conference location:Virtual, Online, Singapore

Conference code:170634

<RECORD 17>

Accession number:20192707124417

Title:Specification and implementation of replicated list: The Jupiter protocol revisited

Authors:Wei, Hengfeng;Huang, Yu;Lu, Jian

Author affiliation:[Wei, Hengfeng;Huang, Yu;Lu, Jian] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing, China

Corresponding author:Huang, Yu(yuhuang@nju.edu.cn)

Source title:Leibniz International Proceedings in Informatics, LIPIcs

Abbreviated source title:Leibniz Int. Proc. Informatics, LIPIcs

Volume:125

Issue date:January 1, 2019

Publication year:2019

Language:English

ISSN:18688969

ISBN-13:9783959770989

Document type:Conference article (CA)

Publisher:Schloss Dagstuhl- Leibniz-Zentrum fur Informatik GmbH, Dagstuhl Publishing

Abstract:The replicated list object is frequently used to model the core functionality of replicated collaborative text editing systems. Since 1989, the convergence property has been a common specification of a replicated list object. Recently, Attiya et al. proposed the strong/weak list specification and conjectured that the well-known Jupiter protocol satisfies the weak list specification. The major obstacle to proving this conjecture is the mismatch between the global property on all replica states prescribed by the specification and the local view each replica maintains in Jupiter using data structures like 1D buffer or 2D state space. To address this issue, we propose CJupiter (Compact Jupiter) based on a novel data structure called n-ary ordered state space for a replicated client/server system with n clients. At a high level, CJupiter maintains only a single n-ary ordered state space which encompasses exactly all states of each replica. We prove that CJupiter and Jupiter are equivalent and that CJupiter satisfies the weak list specification, thus solving the conjecture above. ? Hengfeng Wei, Yu Huang, and Jian Lu.

Number of references:26

Main heading:Specifications

Controlled terms:Data structures - Concurrency control - Distributed computer systems

DOI:10.4230/LIPIcs.OPODIS.2018.12

Database:Compendex

Classification code:722.4 Digital Computers and Systems - 723.2 Data Processing and Image Processing - 902.2 Codes and Standards

Conference name:22nd International Conference on Principles of Distributed Systems, OPODIS 2018

Conference date:December 17, 2018 - December 19, 2018

Conference location:Hong Kong, China

Conference code:148841

Article number:12

<RECORD 18>

Accession number:20183605764358

Title:Brief announcement: Specification and implementation of replicated list: The jupiter protocol revisited

Authors:Wei, Hengfeng;Huang, Yu;Lu, Jian

Author affiliation:[Wei, Hengfeng;Huang, Yu;Lu, Jian] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing, China

Source title:Proceedings of the Annual ACM Symposium on Principles of Distributed Computing

Abbreviated source title:Proc Annu ACM Symp Princ Distrib Comput

Issue date:July 23, 2018

Publication year:2018

Pages:81

Language:English

ISBN-13:9781450357951

CODEN:85LRAZ

Document type:Conference article (CA)

Publisher:Association for Computing Machinery, 2 Penn Plaza, Suite 701, New York, NY 10121-0701, United States

Abstract:The replicated list object is frequently used to model the core functionality of replicated collaborative text editing systems. Recently, Attiya et al. proposed the strong/weak list specification and conjectured that the well-known Jupiter protocol satisfies the weak list specification. The major obstacle to proving this conjecture is the mismatch between the global property on all replica states prescribed by the specification and the local view each replica maintains in Jupiter using data structures like 1D buffer or 2D state space. To address this issue, we propose CJupiter (Compact Jupiter) based on a novel data structure called n-ary ordered state space for a replicated client/server system with n clients. At a high level, CJupiter maintains only a single n-ary ordered state space which encompasses exactly all states of each replica. We prove that CJupiter and Jupiter are equivalent and that CJupiter satisfies the weak list specification, thus solving the conjecture above. ? 2018 Copyright held by the owner/author(s).

Number of references:8

Main heading:Specifications

Controlled terms:Data structures - Distributed computer systems

DOI:10.1145/3212734.3212778

Database:Compendex

Classification code:722.4 Digital Computers and Systems - 723.2 Data Processing and Image Processing - 902.2 Codes and Standards

Conference name:37th ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing, PODC 2018

Conference date:July 23, 2018 - July 27, 2018

Conference location:Egham, United kingdom

Conference code:138527

<RECORD 19>

Accession number:20170803366395

Title:Probabilistically-Atomic 2-Atomicity: Enabling Almost Strong Consistency in Distributed Storage Systems????(Open Access)

Authors:Wei, Hengfeng;Huang, Yu;Lu, Jian

Author affiliation:[Wei, Hengfeng;Huang, Yu;Lu, Jian] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing, Jiangsu 210023, China

Corresponding author:Huang, Yu(yuhuang@nju.edu.cn)

Source title:IEEE Transactions on Computers

Abbreviated source title:IEEE Trans Comput

Volume:66

Issue:3

Issue date:March 1, 2017

Publication year:2017

Pages:502

Language:English

ISSN:00189340

E-ISSN:15579956

CODEN:ITCOB4

Document type:Journal article (JA)

Publisher:IEEE Computer Society

Abstract:A consistency/latency tradeoff arises as soon as a distributed storage system replicates data. For low latency, distributed storage systems often settle for weak consistency conditions, providing little guarantee on data consistency. In this paper, we propose the notion of almost strong consistency as an option for the consistency/latency tradeoff. It provides both deterministically bounded staleness of data versions for reads and probabilistic quantification on the rate of \'reading stale data\', while achieving low latency. We then investigate almost strong consistency in terms of probabilistically-atomic 2-atomicity. Our PA2AM algorithm for the single-writer model completes each read in one communication round-trip, and guarantees that each read obtains the value of within the latest two versions. To quantify the rate of \'reading the stale version\', we decompose the so-called \'old-new inversion\' anomaly into long-lived-write concurrency patterns and non-monotonic read-write patterns, and propose a queueing model and a timed balls-into-bins model to analyze them, respectively. The probabilistic analysis not only demonstrates that old-new inversions rarely occur, but also reveals that the read-write pattern dominates in preventing them from occurring. These are then supported by our experiments. To further demonstrate the benefits of probabilistically-atomic 2-atomicity, we also compare it to weak consistency conditions. ? 2017 IEEE.

Number of references:45

Main heading:Multiprocessing systems

Controlled terms:Digital storage - Atoms - Queueing theory

DOI:10.1109/TC.2016.2601322

Database:Compendex

Classification code:722.1 Data Storage, Equipment and Techniques - 722.4 Digital Computers and Systems - 922.1 Probability Theory - 931.3 Atomic and Molecular Physics

Article number:7547362

<RECORD 20>

Accession number:20175104554722

Title:Parameterized and runtime-tunable snapshot isolation in distributed transactional key-value stores

Authors:Wei, Hengfeng;Huang, Yu;Lu, Jian

Author affiliation:[Wei, Hengfeng;Huang, Yu;Lu, Jian] State Key Laboratory for Novel Software Technology, Nanjing University, China

Source title:Proceedings of the IEEE Symposium on Reliable Distributed Systems

Abbreviated source title:Proc IEEE Symp Reliab Distrib Syst

Volume:2017-September

Issue date:October 13, 2017

Publication year:2017

Pages:21

Language:English

ISSN:10609857

ISBN-13:9781538616796

CODEN:PRDSFK

Document type:Conference article (CA)

Publisher:IEEE Computer Society

Abstract:Several relaxed variants of Snapshot Isolation (SI) have been proposed for improved performance in distributed transactional key-value stores. These relaxed variants, however, provide no specification or control of the severity of the anomalies with respect to SI. They have also been designed to be used statically throughout the whole system life cycle. To overcome these drawbacks, we propose the idea of parameterized and runtime-tunable snapshot isolation. We first define a new transactional consistency model called Relaxed Version Snapshot Isolation (RVSI), which can formally and quantitatively specify the anomalies it may produce with respect to SI. To this end, we decompose SI into three \'view properties\', for each of which we introduce a parameter to quantify one of three kinds of possible anomalies: k1-BV (k1-version bounded backward view), k2-FV (k2-version bounded forward view), and k3-SV (k3-version bounded snapshot view). We then implement a prototype partitioned replicated distributed transactional key-value store called Chameleon across multiple data centers. While achieving RVSI, Chameleon allows each transaction to dynamically tune its consistency level at runtime. The experiments show that RVSI helps to reduce the transaction abort rates when applications are willing to tolerate certain anomalies. We also evaluate the individual impacts of k1-BV, k2-FV, and k3-SV on reducing the transaction abort rates in various scenarios. We find that it depends on the issue delays between clients and replicas which of k1 and k2 plays a major role in reducing transaction abort rates. ? 2017 IEEE.

Number of references:27

Main heading:Life cycle

DOI:10.1109/SRDS.2017.11

Database:Compendex

Classification code:723.3 Database Systems

Conference name:36th IEEE International Symposium on Reliable Distributed Systems, SRDS 2017

Conference date:September 26, 2017 - September 29, 2017

Conference location:Hong Kong, Hong kong

Conference code:131426

Article number:8069065

<RECORD 21>

Accession number:20161702294016

Title:Verifying Pipelined-RAM Consistency over Read/Write Traces of Data Replicas

Authors:Wei, Hengfeng;De Biasi, Marzio;Huang, Yu;Cao, Jiannong;Lu, Jian

Author affiliation:[Wei, Hengfeng;Huang, Yu;Lu, Jian] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing 210023, China [De Biasi, Marzio] Computational Complexity, Puzzles and Machines Organization, Italy [Cao, Jiannong] Hong Kong Polytechnic University, Hong Kong

Corresponding author:Huang, Yu(yuhuang@nju.edu.cn)

Source title:IEEE Transactions on Parallel and Distributed Systems

Abbreviated source title:IEEE Trans Parallel Distrib Syst

Volume:27

Issue:5

Issue date:May 1, 2016

Publication year:2016

Pages:1511

Language:English

ISSN:10459219

E-ISSN:15582183

CODEN:ITDSEO

Document type:Journal article (JA)

Publisher:IEEE Computer Society

Abstract:Data replication technologies in distributed storage systems introduce the problem of data consistency. For high performance, data replication systems often settle for weak consistency models, such as Pipelined-RAM consistency. To determine whether a data replication system provides Pipelined-RAM consistency, we study the problem of verifying Pipelined-RAM consistency over read/write traces (VPC, for short). Four variants of VPC (labeled VPC-SU, VPC-MU, VPC-SD, and VPC-MD) are identified according to whether there are Multiple shared variables (or one Single variable) and whether write operations can assign Duplicate values (or only Unique values) to each shared variable. We prove that VPC-SD is NP-complete (so is VPC-MD) by reducing the strongly NP-complete problem 3-Partition to it. For VPC-MU, we present the Read-Centric algorithm with time complexity O(n4) , where n is the number of operations. The algorithm constructs an operation graph by iteratively applying a rule which guarantees that no overwritten values can be read later. It incrementally processes all the read operations one by one, and exploits the total order between the dictating writes on the same variable to avoid redundant applications of the rule. The experiments have demonstrated its practical efficiency and scalability. ? 1990-2012 IEEE.

Number of references:25

Main heading:Random access storage

Controlled terms:Iterative methods - Multiprocessing systems - Computational complexity - Pipelines

DOI:10.1109/TPDS.2015.2453985

Database:Compendex

Classification code:619.1 Pipe, Piping and Pipelines - 721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 722.1 Data Storage, Equipment and Techniques - 722.4 Digital Computers and Systems - 921.6 Numerical Methods

Article number:7152941

<RECORD 22>

Accession number:20170803375915

Title:Fine-Grained Delta Privacy Preservation for Hierarchical Contexts

Authors:Jiang, Xue;Huang, Yu;Wei, Hengfeng

Author affiliation:[Jiang, Xue;Huang, Yu;Wei, Hengfeng] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing 210023, China

Source title:Proceedings - 13th IEEE International Conference on Ubiquitous Intelligence and Computing, 13th IEEE International Conference on Advanced and Trusted Computing, 16th IEEE International Conference on Scalable Computing and Communications, IEEE International Conference on Cloud and Big Data Computing, IEEE International Conference on Internet of People and IEEE Smart World Congress and Workshops, UIC-ATC-ScalCom-CBDCom-IoP-SmartWorld 2016

Abbreviated source title:Proc. - IEEE Int. Conf. Ubiquitous Intell. Comput., IEEE Int. Conf. Adv. Trust. Comput., IEEE Int. Conf. Scalable Comput. Commun., IEEE Int. Conf. Cloud Big Data Comput., IEEE Int. Conf. Int. People IEEE Smart World Congr. Workshops, UIC-ATC-ScalCom-CBDCom-IoP-SmartWorld

Issue date:January 12, 2017

Publication year:2016

Pages:261

Language:English

ISBN-13:9781509027705

Document type:Conference article (CA)

Publisher:Institute of Electrical and Electronics Engineers Inc., United States

Abstract:Rich contexts enable the provision of context-aware services on mobile smart phones, but they also introduce threats of privacy leakages. It is widely held that the key to privacy preservation is to achieve efficient tradeoffs between the utilization of contexts, the preservation of privacy. G?tz et al. present δ privacy that exploits temporal relation to decide the release/suppression, this technique achieves a good tradeoff. However, δ privacy does not consider the hierarchy of different layers of contexts. In this paper, we propose FDH which provides fine-grained suppression over the context hierarchy, integrates δ privacy. Our experiments on real smart phone context traces show that FDH can release a few suppression contexts in δ privacy with limited cost, obtain relatively high utility while preserving strong privacy. ? 2016 IEEE.

Number of references:22

Main heading:Information services

Controlled terms:Data privacy - Smartphones

DOI:10.1109/UIC-ATC-ScalCom-CBDCom-IoP-SmartWorld.2016.0057

Database:Compendex

Classification code:718.1 Telephone Systems and Equipment - 903.4 Information Services

Conference name:13th IEEE International Conference on Ubiquitous Intelligence and Computing, 13th IEEE International Conference on Advanced and Trusted Computing, 16th IEEE International Conference on Scalable Computing and Communications, IEEE International Conference on Cloud and Big Data Computing, IEEE International Conference on Internet of People and IEEE Smart World Congress and Workshops, UIC-ATC-ScalCom-CBDCom-IoP-SmartWorld 2016

Conference date:July 18, 2016 - July 21, 2016

Conference location:Toulouse, France

Conference code:125906

Article number:7816853

<RECORD 23>

Accession number:20171703592830

Title:Enabling mobile device coordination over distributed shared memory

Authors:Huang, Maosen;Wei, Hengfeng;Huang, Yu

Author affiliation:[Huang, Maosen;Wei, Hengfeng;Huang, Yu] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing 210023, China

Corresponding author:Wei, Hengfeng(hengxin0912@gmail.com)

Source title:Proceedings of the International Conference on Parallel and Distributed Systems - ICPADS

Abbreviated source title:Proc Int Conf Parallel Distrib Syst ICPADS

Issue date:July 2, 2016

Publication year:2016

Pages:64

Language:English

ISSN:15219097

ISBN-13:9781509044573

CODEN:PIPSFH

Document type:Conference article (CA)

Publisher:IEEE Computer Society

Abstract:Distributed shared memory-based coordination has the advantage of simplifying the coordination logic to read/write operations over the illusionary local memory. However, it is notoriously challenging to come up with a cost-effective implementation of the distributed shared memory. The implementation becomes more challenging in mobile environments, due to the resource constraints and the more rapid changes in the computing context. To this end, we propose the Mobile Distributed Shared Memory (MDSM) middleware to facilitate the development of mobile coordination applications. The key constructs in the shared memory are shared registers. Shared registers with different read/write patterns are implemented to facilitate flexible coordination. The registers also have different consistency semantics, to enable efficient tradeoff between data consistency and data access cost. An application framework is proposed to simplify the implementation of mobile coordination, relying on the middleware support from MDSM. A case study is conducted to demonstrate the usage of MDSM, where a soccer game application for the mobile phone is developed. Experimental evaluation is conducted to quantify different options of the consistency-latency tradeoff in the case study. The performance measurements show the cost-effectiveness of eventual consistency in this game. We also verify the read/write traces to further explain why eventual consistency practically performs better than it can guarantee. ? 2016 IEEE.

Number of references:20

Main heading:Middleware

Controlled terms:Computation theory - Memory architecture - Semantics - Cost effectiveness

DOI:10.1109/ICPADS.2016.0018

Database:Compendex

Classification code:721.1 Computer Theory, Includes Formal Logic, Automata Theory, Switching Theory, Programming Theory - 722 Computer Systems and Equipment - 723.1 Computer Programming - 911.2 Industrial Economics

Conference name:22nd IEEE International Conference on Parallel and Distributed Systems, ICPADS 2016

Conference date:December 13, 2016 - December 16, 2016

Conference location:Wuhan, Hubei, China

Conference code:126065

Article number:7823733

<RECORD 24>

Accession number:20122315082503

Title:Formal specification and runtime detection of temporal properties for asynchronous context

Authors:Wei, Hengfeng;Huang, Yu;Cao, Jiannong;Ma, Xiaoxing;Lu, Jian

Author affiliation:[Wei, Hengfeng;Huang, Yu;Ma, Xiaoxing;Lu, Jian] State Key Laboratory for Novel Software Technology, Nanjing University, Nanjing 210093, China [Wei, Hengfeng;Huang, Yu;Ma, Xiaoxing;Lu, Jian] Institute of Computer Software, Nanjing University, Nanjing 210093, China [Cao, Jiannong] Internet and Mobile Computing Lab, Department of Computing, Hong Kong Polytechnic University, Hong Kong, Hong Kong

Corresponding author:Huang, Y.(yuhuang@nju.edu.cn)

Source title:2012 IEEE International Conference on Pervasive Computing and Communications, PerCom 2012

Abbreviated source title:IEEE Int. Conf. Pervasive Comput. Commun., PerCom

Issue date:2012

Publication year:2012

Pages:30

Language:English

ISBN-13:9781467302586

Document type:Conference article (CA)

Publisher:IEEE Computer Society

Abstract:Formal specification and runtime detection of temporal properties for pervasive context is one of the primary approaches to achieving context-awareness. Though temporal logics have been widely used in specification of temporal properties, they are faced with severe challenges in Pervasive Computing (PvC) scenarios. First, temporal logics are traditionally defined over infinite traces of possible system behavior. However in PvC scenarios, applications observe finite prefixes of (potentially infinite) traces of environment state evolution, and adapt their behavior accordingly. Second, specification and detection of temporal properties are challenged by the intrinsic asynchrony of PvC environments. Discussions above necessitate a systematic approach to formal specification and runtime detection of temporal properties for asynchronous context. To this end, we propose CTL3 (3-valued Computation Tree Logic), which i) adopts 3-valued semantics to capture the inconclusiveness when applications only observe finite prefixes of environment state evolution; ii) inherits the notion of branching time to capture the uncertainty resulting from the asynchrony of PvC environments. A case study is conducted to demonstrate how CTL3 supports context-awareness in PvC scenarios. The runtime checking algorithm of CTL 3 is implemented and evaluated over MIPA-the open-source context-aware middle-ware we developed. The case study demonstrates the necessity of adopting CTL3 in PvC scenarios, while the performance measurements show the cost-effectiveness of runtime checking contextual properties in CTL3. ? 2012 IEEE.

Number of references:27

Main heading:Ubiquitous computing

Controlled terms:Cost effectiveness - Formal specification - Semantics - Temporal logic

DOI:10.1109/PerCom.2012.6199846

Database:Compendex

Classification code:461.4 Ergonomics and Human Factors Engineering - 723.5 Computer Applications - 911.2 Industrial Economics

Conference name:10th IEEE International Conference on Pervasive Computing and Communications, PerCom 2012

Conference date:March 19, 2012 - March 23, 2012

Conference location:Lugano, Switzerland

Conference code:89962

Article number:6199846

三、魏恒峰的研究论文被SCIE收录情况

第 1 条，共 8 条

**文献标题:**Model-checking-driven explorative testing of CRDT designs and implementations

**作者:**Zhang, YQ;Huang, Y;Wei, HF;Ma, XX

**文献类型:**Article

**出版物名称:**JOURNAL OF SOFTWARE-EVOLUTION AND PROCESS **卷:**36 **期:**4 **页数:**20 **DOI:**10.1002/smr.2555 **出版年:**APR 2024

**入藏号:**WOS:000949220800001

**作者地址:**[Zhang, Yuqi; Huang, Yu; Wei, Hengfeng; Ma, Xiaoxing] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. [Huang, Yu] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Jiangsu, Peoples R China. C3 Nanjing University; Nanjing University

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**国际标准期刊号 (ISSN):**20477473

第 2 条，共 8 条

**文献标题:**IsoVista: Black-box Checking Database Isolation Guarantees

**作者:**Gu, L;Liu, S;Xing, TC;Wei, HF;Chen, YX;Basin, D

**文献类型:**Article

**出版物名称:**PROCEEDINGS OF THE VLDB ENDOWMENT **卷:**17 **期:**12 **页数:**4325-4328 **DOI:**10.14778/3685800.3685866 **出版年:**AUG 2024

**入藏号:**WOS:001378223700018

**作者地址:**[Gu, Long; Xing, Tiancheng; Wei, Hengfeng] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. [Liu, Si; Basin, David] Swiss Fed Inst Technol, Zurich, Switzerland. [Chen, Yuxing] Tencent Inc, Guangzhou, Peoples R China. C3 Nanjing University; Swiss Federal Institutes of Technology Domain; ETH Zurich; Tencent

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**国际标准期刊号 (ISSN):**21508097

第 3 条，共 8 条

**文献标题:**Efficient Black-box Checking of Snapshot Isolation in Databases

**作者:**Huang, KL;Liu, S;Chen, ZG;Wei, HF;Basin, D;Li, HX;Pan, AQ

**文献类型:**Article; Proceedings Paper

**出版物名称:**PROCEEDINGS OF THE VLDB ENDOWMENT **卷:**16 **期:**6 **页数:**1264-1276 **DOI:**10.14778/3583140.3583145 **出版年:**FEB 2023

**入藏号:**WOS:000992408800006

**作者地址:**[Huang, Kaile; Chen, Zhenge; Wei, Hengfeng] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. [Liu, Si; Basin, David] Swiss Fed Inst Technol, Zurich, Switzerland. [Li, Haixiang; Pan, Anqun] Tencent Inc, Shenzhen, Peoples R China. [Wei, Hengfeng] Nanjing Univ, Software Inst, Nanjing, Peoples R China. C3 Nanjing University; Swiss Federal Institutes of Technology Domain; ETH Zurich; Tencent; Nanjing University

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**会议标题:**49th International Conference on Very Large Data Bases (VLDB) **会议日期:**AUG 28-SEP 01, 2023 **会议地点:**Vancouver, CANADA

**国际标准期刊号 (ISSN):**21508097

第 4 条，共 8 条

**文献标题:**Checking Causal Consistency of MongoDB

**作者:**Ouyang, HR;Wei, HF;Li, HX;Pan, AQ;Huang, Y

**文献类型:**Article

**出版物名称:**JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY **卷:**37 **期:**1 **页数:**128-146 **DOI:**10.1007/s11390-021-1662-8 **出版年:**FEB 2022

**入藏号:**WOS:000757837300008

**作者地址:**[Ouyang, Hong-Rong; Wei, Heng-Feng; Huang, Yu] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Peoples R China. [Wei, Heng-Feng] Nanjing Univ, Software Inst, Nanjing 210093, Peoples R China. [Li, Hai-Xiang; Pan, An-Qun] Tencent Inc, Tencent Distributed SQL Team Technol & Engn Grp T, Shenzhen 518054, Peoples R China. C3 Nanjing University; Nanjing University; Tencent

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**国际标准期刊号 (ISSN):**10009000

第 5 条，共 8 条

**文献标题:**Achieving Probabilistic Atomicity With Well-Bounded Staleness and Low Read Latency in Distributed Datastores

**作者:**Ouyang, LZ;Huang, Y;Wei, HF;Lu, J

**文献类型:**Article

**出版物名称:**IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS **卷:**32 **期:**4 **页数:**815-829 **DOI:**10.1109/TPDS.2020.3034328 **出版年:**APR 1 2021

**入藏号:**WOS:000591807700002

**作者地址:**[Ouyang, Lingzhi; Huang, Yu; Wei, Hengfeng; Lu, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Peoples R China. [Ouyang, Lingzhi; Huang, Yu; Wei, Hengfeng; Lu, Jian] Nanjing Univ, Dept Comp Sci & Technol, Nanjing 210023, Peoples R China. C3 Nanjing University; Nanjing University

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**国际标准期刊号 (ISSN):**10459219

第 6 条，共 8 条

**文献标题:**Jupiter Made Abstract, and Then Refined

**作者:**Wei, HF;Tang, RZ;Huang, Y;Lv, J

**文献类型:**Article

**出版物名称:**JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY **卷:**35 **期:**6 **页数:**1343-1364 **DOI:**10.1007/s11390-020-0516-0 **出版年:**NOV 2020

**入藏号:**WOS:000596524900008

**作者地址:**[Wei, Heng-Feng; Tang, Rui-Ze; Huang, Yu; Lv, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Peoples R China. C3 Nanjing University

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**国际标准期刊号 (ISSN):**10009000

第 7 条，共 8 条

**文献标题:**Probabilistically-Atomic 2-Atomicity: Enabling Almost Strong Consistency in Distributed Storage Systems

**作者:**Wei, HF;Huang, Y;Lu, J

**文献类型:**Article

**出版物名称:**IEEE TRANSACTIONS ON COMPUTERS **卷:**66 **期:**3 **页数:**502-514 **DOI:**10.1109/TC.2016.2601322 **出版年:**MAR 1 2017

**入藏号:**WOS:000395629500010

**作者地址:**[Wei, Hengfeng; Huang, Yu; Lu, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Jiangsu, Peoples R China. C3 Nanjing University

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**国际标准期刊号 (ISSN):**00189340

第 8 条，共 8 条

**文献标题:**Verifying Pipelined-RAM Consistency over Read/Write Traces of Data Replicas

**作者:**Wei, HF;De Biasi, M;Huang, Y;Cao, JN;Lu, J

**文献类型:**Article

**出版物名称:**IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS **卷:**27 **期:**5 **页数:**1511-1523 **DOI:**10.1109/TPDS.2015.2453985 **出版年:**MAY 2016

**入藏号:**WOS:000374238100021

**作者地址:**[Wei, Hengfeng; Huang, Yu; Lu, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210008, Jiangsu, Peoples R China. [De Biasi, Marzio] Puzzles & Machines Org, Computat Complex, Milan, Italy. [Cao, Jiannong] Hong Kong Polytech Univ, Hong Kong, Hong Kong, Peoples R China. C3 Nanjing University; Hong Kong Polytechnic University

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**国际标准期刊号 (ISSN):**10459219

四、魏恒峰的研究论文被CPCI-S收录情况

第 1 条，共 11 条

**文献标题:**Efficient Black-box Checking of Snapshot Isolation in Databases

**作者:**Huang, KL;Liu, S;Chen, ZG;Wei, HF;Basin, D;Li, HX;Pan, AQ

**文献类型:**Article; Proceedings Paper

**出版物名称:**PROCEEDINGS OF THE VLDB ENDOWMENT **卷:**16 **期:**6 **页数:**1264-1276 **DOI:**10.14778/3583140.3583145 **出版年:**FEB 2023

**入藏号:**WOS:000992408800006

**作者地址:**[Huang, Kaile; Chen, Zhenge; Wei, Hengfeng] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. [Liu, Si; Basin, David] Swiss Fed Inst Technol, Zurich, Switzerland. [Li, Haixiang; Pan, Anqun] Tencent Inc, Shenzhen, Peoples R China. [Wei, Hengfeng] Nanjing Univ, Software Inst, Nanjing, Peoples R China. C3 Nanjing University; Swiss Federal Institutes of Technology Domain; ETH Zurich; Tencent; Nanjing University

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**会议标题:**49th International Conference on Very Large Data Bases (VLDB) **会议日期:**AUG 28-SEP 01, 2023 **会议地点:**Vancouver, CANADA

**国际标准期刊号 (ISSN):**21508097

第 2 条，共 11 条

**文献标题:**Tunable Causal Consistency: Specification and Implementation

**作者:**Jiang, X;Wei, HF;Huang, Y

**文献类型:**Proceedings Paper

**出版物名称:**2022 IEEE 28TH INTERNATIONAL CONFERENCE ON PARALLEL AND DISTRIBUTED SYSTEMS, ICPADS **页数:**169-176 **DOI:**10.1109/ICPADS56603.2022.00030 **出版年:**2022

**入藏号:**WOS:000983289900022

**作者地址:**[Jiang, Xue; Wei, Hengfeng; Huang, Yu] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. C3 Nanjing University

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**会议标题:**IEEE 28th International Conference on Parallel and Distributed Systems (IEEE ICPADS) **会议日期:**JAN 10-12, 2023 **会议地点:**Nanjing, PEOPLES R CHINA

**国际标准期刊号 (ISSN):**15219097

第 3 条，共 11 条

**文献标题:**Incremental Causal Consistency Checking for Read-Write Memory Histories

**作者:**Huang, Y;Wei, HF

**文献类型:**Proceedings Paper

**出版物名称:**13TH ASIA-PACIFIC SYMPOSIUM ON INTERNETWARE, INTERNETWARE 2022 **页数:**181-191 **DOI:**10.1145/3545258.3545262 **出版年:**2022

**入藏号:**WOS:001086087500020

**作者地址:**[Huang, Yi] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. [Wei, Hengfeng] Nanjing Univ, State Key Lab Novel Software Technol, Software Inst, Nanjing, Peoples R China. C3 Nanjing University; Nanjing University

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**会议标题:**13th Asia-Pacific Symposium on Internetware (Internetware) - A Software Paradigm for Internet Computing **会议日期:**JUN 11-12, 2022 **会议地点:**ELECTR NETWORK

第 4 条，共 11 条

**文献标题:**UNISTORE: A fault-tolerant marriage of causal and strong consistency

**作者:**Bravo, M;Gotsman, A;de Régil, B;Wei, HF

**文献类型:**Proceedings Paper

**出版物名称:**PROCEEDINGS OF THE 2021 USENIX ANNUAL TECHNICAL CONFERENCE **页数:**923-937 **出版年:**2021

**入藏号:**WOS:000696708600061

**作者地址:**[Bravo, Manuel; Gotsman, Alexey; de Regil, Borja] IMDEA Software Inst, Madrid, Spain. [Wei, Hengfeng] Nanjing Univ, Nanjing, Jiangsu, Peoples R China. [Wei, Hengfeng] Software Inst, State Key Lab Novel Software Technol, Nanjing, Jiangsu, Peoples R China. C3 IMDEA Software Institute; Nanjing University

**通讯作者地址:**Bravo, M (通讯作者)，IMDEA Software Inst, Madrid, Spain.

**会议标题:**USENIX Annual Technical Conference / 15th USENIX Symposium on Operating Systems Design and Implementation (OSDI) **会议日期:**JUL 14-16, 2021 **会议地点:**ELECTR NETWORK

第 5 条，共 11 条

**文献标题:**Checking Causal Consistency of MongoDB

**作者:**Ouyang, HR;Wei, HF;Huang, Y

**文献类型:**Proceedings Paper

**出版物名称:**THE 12TH ASIA-PACIFIC SYMPOSIUM ON INTERNETWARE, INTERNETWARE 2020 **页数:**209-216 **DOI:**10.1145/3457913.3457928 **出版年:**2021

**入藏号:**WOS:001143154800023

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**会议标题:**12th Asia-Pacific Symposium on Internetware (Internetware) - A Software Paradigm for Internet Computing **会议日期:**MAY 12-14, 2021 **会议地点:**ELECTR NETWORK

第 6 条，共 11 条

**文献标题:**A Generic Specification Framework for Weakly Consistent Replicated Data Types

**作者:**Jiang, X;Wei, HF;Huang, Y

**文献类型:**Proceedings Paper

**出版物名称:**2020 INTERNATIONAL SYMPOSIUM ON RELIABLE DISTRIBUTED SYSTEMS (SRDS 2020) **页数:**143-154 **DOI:**10.1109/SRDS51746.2020.00022 **出版年:**2020

**入藏号:**WOS:000646196200015

**作者地址:**[Jiang, Xue; Wei, Hengfeng; Huang, Yu] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. C3 Nanjing University

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**会议标题:**39th International Symposium on Reliable Distributed Systems (SRDS) **会议日期:**SEP 21-24, 2020 **会议地点:**Shanghai, PEOPLES R CHINA

**国际标准期刊号 (ISSN):**10609857

第 7 条，共 11 条

**文献标题:**Brief Announcement: Specification and Implementation of Replicated List: The Jupiter Protocol Revisited

**作者:**Wei, HF;Huang, Y;Lu, J

**文献类型:**Proceedings Paper

**出版物名称:**PODC'18: PROCEEDINGS OF THE 2018 ACM SYMPOSIUM ON PRINCIPLES OF DISTRIBUTED COMPUTING **页数:**81-83 **DOI:**10.1145/3212734.3212778 **出版年:**2018

**入藏号:**WOS:000458186900010

**作者地址:**[Wei, Hengfeng; Huang, Yu; Lu, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Jiangsu, Peoples R China. C3 Nanjing University

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**会议标题:**37th ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing (PODC) **会议日期:**JUL 23-27, 2018 **会议地点:**Royal Holloway Univ London, Egham, ENGLAND

第 8 条，共 11 条

**文献标题:**Parameterized and Runtime-tunable Snapshot Isolation in Distributed Transactional Key-value Stores

**作者:**Wei, HF;Huang, Y;Lu, J

**文献类型:**Proceedings Paper

**出版物名称:**2017 IEEE 36TH INTERNATIONAL SYMPOSIUM ON RELIABLE DISTRIBUTED SYSTEMS (SRDS) **页数:**21-33 **DOI:**10.1109/SRDS.2017.11 **出版年:**2017

**入藏号:**WOS:000425924600003

**作者地址:**[Wei, Hengfeng; Huang, Yu; Lu, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Jiangsu, Peoples R China. C3 Nanjing University

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**会议标题:**36th IEEE Symposium on Reliable Distributed Systems (SRDS) **会议日期:**SEP 26-29, 2017 **会议地点:**Hong Kong, HONG KONG

**国际标准期刊号 (ISSN):**10609857

第 9 条，共 11 条

**文献标题:**Enabling Mobile Device Coordination over Distributed Shared Memory

**作者:**Huang, MS;Wei, HF;Huang, Y

**文献类型:**Proceedings Paper

**出版物名称:**2016 IEEE 22ND INTERNATIONAL CONFERENCE ON PARALLEL AND DISTRIBUTED SYSTEMS (ICPADS) **页数:**64-71 **DOI:**10.1109/ICPADS.2016.16 **出版年:**2016

**入藏号:**WOS:000393188800009

**作者地址:**[Huang, Maosen; Wei, Hengfeng; Huang, Yu] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Jiangsu, Peoples R China. C3 Nanjing University

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**会议标题:**22nd IEEE International Conference on Parallel and Distributed Systems (ICPADS) **会议日期:**DEC 13-16, 2016 **会议地点:**Wuhan, PEOPLES R CHINA

**国际标准期刊号 (ISSN):**15219097

第 10 条，共 11 条

**文献标题:**Fine-grained Delta Privacy Preservation for Hierarchical Contexts

**作者:**Jiang, X;Huang, Y;Wei, HF

**文献类型:**Proceedings Paper

**出版物名称:**2016 INT IEEE CONFERENCES ON UBIQUITOUS INTELLIGENCE & COMPUTING, ADVANCED & TRUSTED COMPUTING, SCALABLE COMPUTING AND COMMUNICATIONS, CLOUD AND BIG DATA COMPUTING, INTERNET OF PEOPLE, AND SMART WORLD CONGRESS (UIC/ATC/SCALCOM/CBDCOM/IOP/SMARTWORLD) **页数:**261-268 **DOI:**10.1109/UIC-ATC-ScalCom-CBDCom-IoP-SmartWorld.2016.17 **出版年:**2016

**入藏号:**WOS:000393306500034

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**会议标题:**Conference on UIC/ATC/ScalCom/CBDCom/IoP/SmartWorld **会议日期:**JUL 18-21, 2016 **会议地点:**Toulouse, FRANCE

第 11 条，共 11 条

**文献标题:**Formal Specification and Runtime Detection of Temporal Properties for Asynchronous Context

**作者:**Wei, HF;Huang, Y;Cao, JN;Ma, XX;Lu, J

**文献类型:**Proceedings Paper

**出版物名称:**2012 IEEE INTERNATIONAL CONFERENCE ON PERVASIVE COMPUTING AND COMMUNICATIONS (PERCOM) **页数:**30-38 **出版年:**2012

**入藏号:**WOS:000309103700005

**作者地址:**[Wei, Hengfeng; Huang, Yu; Ma, Xiaoxing; Lu, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210093, Jiangsu, Peoples R China. [Wei, Hengfeng; Huang, Yu; Ma, Xiaoxing; Lu, Jian] Nanjing Univ, Inst Comp Software, Nanjing 210093, Jiangsu, Peoples R China. [Cao, Jiannong] Hong Kong Polytech Univ, Dept Comp, Internet & Mobile Comp Lab, Hong Kong, Hong Kong, Peoples R China. C3 Nanjing University; Nanjing University; Hong Kong Polytechnic University

**通讯作者地址:**Huang, Y (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210093, Jiangsu, Peoples R China.

**电子邮件地址:**hengxin0912@gmail.com; yuhuang@nju.edu.cn; csjcao@comp.polyu.edu.hk; xxm@nju.edu.cn; lj@nju.edu.cn

**会议标题:**10th IEEE International Conference on Pervasive Computing and Communications (PerCom) **会议日期:**MAR 19-23, 2012 **会议地点:**Univ Appl Sci & Arts So Switzerland (SUPSI), Lugano, SWITZERLAND

**国际标准期刊号 (ISSN):**24742503

五、魏恒峰的研究论文被CSCD收录情况

第 1 条，共 3 条

**作者:**Gu Xiaosong;Wei Hengfeng;Qiao Lei;Huang Yu

**文献标题:**支持乱序执行的Raft协议

**文献类型:**Article

**出版物名称:**软件学报 **卷:**32 **期:**6 **页数:**1748-1778 **出版年:**2021

**文献编号:**1000-9825(2021)32:6<1748:ZCLXZX>2.0.TX;2-#

**入藏号:**CSCD:6987359

**作者地址:**谷晓松, 南京大学, 计算机软件新技术国家重点实验室, 南京, 江苏 210023, 中国. 魏恒峰, 南京大学, 计算机软件新技术国家重点实验室, 南京, 江苏 210023, 中国. 黄宇, 南京大学, 计算机软件新技术国家重点实验室, 南京, 江苏 210023, 中国. 乔磊, 北京控制工程研究所, 北京 100190, 中国.

**国际标准期刊号 (ISSN):**10009825

第 2 条，共 3 条

**作者:**Ji Ye;Wei Hengfeng;Huang Yu;Lu Jian

**文献标题:**CRDT协议的TLA+描述与验证

**文献类型:**Article

**出版物名称:**软件学报 **卷:**31 **期:**5 **页数:**1332-1352 **出版年:**2020

**文献编号:**1000-9825(2020)31:5<1332:CXYDTM>2.0.TX;2-T

**入藏号:**CSCD:6724180

**作者地址:**纪业, 南京大学, 计算机软件新技术国家重点实验室, 南京, 江苏 210023, 中国. 魏恒峰, 南京大学, 计算机软件新技术国家重点实验室, 南京, 江苏 210023, 中国. 黄宇, 南京大学, 计算机软件新技术国家重点实验室, 南京, 江苏 210023, 中国. 吕建, 南京大学, 计算机软件新技术国家重点实验室, 南京, 江苏 210023, 中国.

**国际标准期刊号 (ISSN):**10009825

第 3 条，共 3 条

**作者:**Yi Xingchen;Wei Hengfeng;Huang Yu;Qiao Lei;Lu Jian

**文献标题:**PaxosStore中共识协议TPaxos的推导、规约与精化

**文献类型:**Article

**出版物名称:**软件学报 **卷:**31 **期:**8 **页数:**2336-2361 **出版年:**2020

**文献编号:**1000-9825(2020)31:8<2336:PZGSXY>2.0.TX;2-1

**入藏号:**CSCD:6788486

**作者地址:**易星辰, 南京大学, 计算机软件新技术国家重点实验室, 南京, 江苏 210023, 中国. 魏恒峰, 南京大学, 计算机软件新技术国家重点实验室, 南京, 江苏 210023, 中国. 黄宇, 南京大学, 计算机软件新技术国家重点实验室, 南京, 江苏 210023, 中国. 吕建, 南京大学, 计算机软件新技术国家重点实验室, 南京, 江苏 210023, 中国. 乔磊, 北京控制工程研究所, 北京 100190, 中国.

**国际标准期刊号 (ISSN):**10009825

六、SCIE文章被WOS引用次数统计表

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 序号 | 题名 | 论文出处 | 实际被引 | 他引次数 |
| 1. | Model-checking-driven explorative testing of CRDT designs and implementations | JOURNAL OF SOFTWARE-EVOLUTION AND PROCESS;36(4);20;2024 | 1 | 1 |
| 2. | IsoVista: Black-box Checking Database Isolation Guarantees | PROCEEDINGS OF THE VLDB ENDOWMENT;17(12);4325-4328;2024 | 0 | 0 |
| 3. | Efficient Black-box Checking of Snapshot Isolation in Databases | PROCEEDINGS OF THE VLDB ENDOWMENT;16(6);1264-1276;2023 | 5 | 3 |
| 4. | Checking Causal Consistency of MongoDB | JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY;37(1);128-146;2022 | 0 | 0 |
| 5. | Achieving Probabilistic Atomicity With Well-Bounded Staleness and Low Read Latency in Distributed Datastores | IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS;32(4);815-829;2021 | 1 | 1 |
| 6. | Jupiter Made Abstract, and Then Refined | JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY;35(6);1343-1364;2020 | 1 | 0 |
| 7. | Probabilistically-Atomic 2-Atomicity: Enabling Almost Strong Consistency in Distributed Storage Systems | IEEE TRANSACTIONS ON COMPUTERS;66(3);502-514;2017 | 3 | 2 |
| 8. | Verifying Pipelined-RAM Consistency over Read/Write Traces of Data Replicas | IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS;27(5);1511-1523;2016 | 4 | 1 |
| 合计 |  |  | 15 | 8 |

七、CPCI-S文章被WOS引用次数统计表

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 序号 | 题名 | 论文出处 | 实际被引 | 他引次数 |
| 1. | Efficient Black-box Checking of Snapshot Isolation in Databases | PROCEEDINGS OF THE VLDB ENDOWMENT;16(6);1264-1276;2023 | 5 | 3 |
| 2. | Tunable Causal Consistency: Specification and Implementation | 2022 IEEE 28TH INTERNATIONAL CONFERENCE ON PARALLEL AND DISTRIBUTED SYSTEMS, ICPADS;();169-176;2022 | 0 | 0 |
| 3. | Incremental Causal Consistency Checking for Read-Write Memory Histories | 13TH ASIA-PACIFIC SYMPOSIUM ON INTERNETWARE, INTERNETWARE 2022;();181-191;2022 | 0 | 0 |
| 4. | UNISTORE: A fault-tolerant marriage of causal and strong consistency | PROCEEDINGS OF THE 2021 USENIX ANNUAL TECHNICAL CONFERENCE;();923-937;2021 | 3 | 3 |
| 5. | Checking Causal Consistency of MongoDB | THE 12TH ASIA-PACIFIC SYMPOSIUM ON INTERNETWARE, INTERNETWARE 2020;();209-216;2021 | 3 | 1 |
| 6. | A Generic Specification Framework for Weakly Consistent Replicated Data Types | 2020 INTERNATIONAL SYMPOSIUM ON RELIABLE DISTRIBUTED SYSTEMS (SRDS 2020);();143-154;2020 | 1 | 0 |
| 7. | Brief Announcement: Specification and Implementation of Replicated List: The Jupiter Protocol Revisited | PODC'18: PROCEEDINGS OF THE 2018 ACM SYMPOSIUM ON PRINCIPLES OF DISTRIBUTED COMPUTING;();81-83;2018 | 3 | 3 |
| 8. | Parameterized and Runtime-tunable Snapshot Isolation in Distributed Transactional Key-value Stores | 2017 IEEE 36TH INTERNATIONAL SYMPOSIUM ON RELIABLE DISTRIBUTED SYSTEMS (SRDS);();21-33;2017 | 17 | 17 |
| 9. | Enabling Mobile Device Coordination over Distributed Shared Memory | 2016 IEEE 22ND INTERNATIONAL CONFERENCE ON PARALLEL AND DISTRIBUTED SYSTEMS (ICPADS);();64-71;2016 | 0 | 0 |
| 10. | Fine-grained Delta Privacy Preservation for Hierarchical Contexts | 2016 INT IEEE CONFERENCES ON UBIQUITOUS INTELLIGENCE & COMPUTING, ADVANCED & TRUSTED COMPUTING, SCALABLE COMPUTING AND COMMUNICATIONS, CLOUD AND BIG DATA COMPUTING, INTERNET OF PEOPLE, AND SMART WORLD CONGRESS (UIC/ATC/SCALCOM/CBDCOM/IOP/SMARTWORLD);();261-268;2016 | 2 | 2 |
| 11. | Formal Specification and Runtime Detection of Temporal Properties for Asynchronous Context | 2012 IEEE INTERNATIONAL CONFERENCE ON PERVASIVE COMPUTING AND COMMUNICATIONS (PERCOM);();30-38;2012 | 19 | 19 |
| 合计 |  |  | 53 | 48 |

八、CSCD文章被CSCD引用次数统计表

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 序号 | 题名 | 论文出处 | 实际被引 | 他引次数 |
| 1. | 支持乱序执行的Raft协议 | 软件学报;32(6);1748-1778;2021 | 1 | 1 |
| 2. | CRDT协议的TLA+描述与验证 | 软件学报;31(5);1332-1352;2020 | 4 | 3 |
| 3. | PaxosStore中共识协议TPaxos的推导、规约与精化 | 软件学报;31(8);2336-2361;2020 | 1 | 0 |
| 合计 |  |  | 6 | 4 |

九、魏恒峰SCIE收录的研究论文被WOS引用的情况

第 1 条，共 8 条

**文献标题:**Model-checking-driven explorative testing of CRDT designs and implementations

**作者:**Zhang, YQ;Huang, Y;Wei, HF;Ma, XX

**文献类型:**Article

**出版物名称:**JOURNAL OF SOFTWARE-EVOLUTION AND PROCESS **卷:**36 **期:**4 **页数:**20 **DOI:**10.1002/smr.2555 **出版年:**APR 2024

**入藏号:**WOS:000949220800001

**作者地址:**[Zhang, Yuqi; Huang, Yu; Wei, Hengfeng; Ma, Xiaoxing] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. [Huang, Yu] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Jiangsu, Peoples R China. C3 Nanjing University; Nanjing University

**通讯作者地址:**Huang, Y (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Jiangsu, Peoples R China.

**电子邮件地址:**yuhuang@nju.edu.cn

**国际标准期刊号 (ISSN):**20477473

该文献被引次数：1次

1-1.An Empirical Study on Kubernetes Operator Bugs

Authors:Xu, Q;Gao, Y;Jun, W

Source:PROCEEDINGS OF THE 33RD ACM SIGSOFT INTERNATIONAL SYMPOSIUM ON SOFTWARE TESTING AND ANALYSIS, ISSTA 2024 pages: 1746-1758.Published: 2024

第 2 条，共 8 条

**文献标题:**IsoVista: Black-box Checking Database Isolation Guarantees

**作者:**Gu, L;Liu, S;Xing, TC;Wei, HF;Chen, YX;Basin, D

**文献类型:**Article

**出版物名称:**PROCEEDINGS OF THE VLDB ENDOWMENT **卷:**17 **期:**12 **页数:**4325-4328 **DOI:**10.14778/3685800.3685866 **出版年:**AUG 2024

**入藏号:**WOS:001378223700018

**作者地址:**[Gu, Long; Xing, Tiancheng; Wei, Hengfeng] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. [Liu, Si; Basin, David] Swiss Fed Inst Technol, Zurich, Switzerland. [Chen, Yuxing] Tencent Inc, Guangzhou, Peoples R China. C3 Nanjing University; Swiss Federal Institutes of Technology Domain; ETH Zurich; Tencent

**通讯作者地址:**Gu, L (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China.

**电子邮件地址:**axingguchen@tencent.com; si.liu@inf.ethz.ch; xtc1207445468@outlook.com; hfwei@nju.edu.cn; axingguchen@tencent.com; basin@inf.ethz.ch

**国际标准期刊号 (ISSN):**21508097

该文献被引次数：0次

第 3 条，共 8 条

**文献标题:**Efficient Black-box Checking of Snapshot Isolation in Databases

**作者:**Huang, KL;Liu, S;Chen, ZG;Wei, HF;Basin, D;Li, HX;Pan, AQ

**文献类型:**Article; Proceedings Paper

**出版物名称:**PROCEEDINGS OF THE VLDB ENDOWMENT **卷:**16 **期:**6 **页数:**1264-1276 **DOI:**10.14778/3583140.3583145 **出版年:**FEB 2023

**入藏号:**WOS:000992408800006

**作者地址:**[Huang, Kaile; Chen, Zhenge; Wei, Hengfeng] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. [Liu, Si; Basin, David] Swiss Fed Inst Technol, Zurich, Switzerland. [Li, Haixiang; Pan, Anqun] Tencent Inc, Shenzhen, Peoples R China. [Wei, Hengfeng] Nanjing Univ, Software Inst, Nanjing, Peoples R China. C3 Nanjing University; Swiss Federal Institutes of Technology Domain; ETH Zurich; Tencent; Nanjing University

**通讯作者地址:**Wei, HF (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China.

**电子邮件地址:**dg21330016@smail.nju.edu.cn; si.liu@inf.ethz.ch; 191250013@smail.nju.edu.cn; hfwei@nju.edu.cn; basin@inf.ethz.ch; blueseali@tencent.com; aaronpan@tencent.com

**会议标题:**49th International Conference on Very Large Data Bases (VLDB) **会议日期:**AUG 28-SEP 01, 2023 **会议地点:**Vancouver, CANADA

**国际标准期刊号 (ISSN):**21508097

该文献被引次数：5次

3-1.Checking Transaction Isolation Violations Using Graph Queries

Authors:Dumbrava, S;Jin, Z;Ozkan, BK;Qiu, JX

Source:GRAPH TRANSFORMATION, ICGT 2024, volume: 14774 pages: 203-213.Published: 2024

3-2.Plume: Efficient and Complete Black-Box Checking of Weak Isolation Levels [自引文献]

Authors:Liu, S;Gu, L;Wei, HF;Basin, D

Source:PROCEEDINGS OF THE ACM ON PROGRAMMING LANGUAGES-PACMPL, volume: 8 issue: OOPSLAPublished: OCT 2024

3-3.IsoVista: Black-box Checking Database Isolation Guarantees [自引文献]

Authors:Gu, L;Liu, S;Xing, TC;Wei, HF;Chen, YX;Basin, D

Source:PROCEEDINGS OF THE VLDB ENDOWMENT, volume: 17 issue: 12 pages: 4325-4328.Published: AUG 2024

3-4.TDSQL: Tencent Distributed Database System

Authors:Chen, YX;Pan, A;Lei, HL;Ye, A;Han, S;Tang, Y;Lu, W;Chai, YP;Zhang, F;Du, XY

Source:PROCEEDINGS OF THE VLDB ENDOWMENT, volume: 17 issue: 12 pages: 3869-3882.Published: AUG 2024

3-5.Detecting Transactional Bugs in Database Engines via Graph-Based Oracle Construction

Authors:Jiang, ZM;Liu, S;Rigger, M;Su, ZD

Source:PROCEEDINGS OF THE 17TH USENIX SYMPOSIUM ON OPERATING SYSTEMS DESIGN AND IMPLEMENTATION, OSDI 2023 pages: 397-417.Published: 2023

该文献被引次数：5次

3-1.Checking Transaction Isolation Violations Using Graph Queries

Authors:Dumbrava, S;Jin, Z;Ozkan, BK;Qiu, JX

Source:GRAPH TRANSFORMATION, ICGT 2024, volume: 14774 pages: 203-213.Published: 2024

3-2.Plume: Efficient and Complete Black-Box Checking of Weak Isolation Levels [自引文献]

Authors:Liu, S;Gu, L;Wei, HF;Basin, D

Source:PROCEEDINGS OF THE ACM ON PROGRAMMING LANGUAGES-PACMPL, volume: 8 issue: OOPSLAPublished: OCT 2024

3-3.IsoVista: Black-box Checking Database Isolation Guarantees [自引文献]

Authors:Gu, L;Liu, S;Xing, TC;Wei, HF;Chen, YX;Basin, D

Source:PROCEEDINGS OF THE VLDB ENDOWMENT, volume: 17 issue: 12 pages: 4325-4328.Published: AUG 2024

3-4.TDSQL: Tencent Distributed Database System

Authors:Chen, YX;Pan, A;Lei, HL;Ye, A;Han, S;Tang, Y;Lu, W;Chai, YP;Zhang, F;Du, XY

Source:PROCEEDINGS OF THE VLDB ENDOWMENT, volume: 17 issue: 12 pages: 3869-3882.Published: AUG 2024

3-5.Detecting Transactional Bugs in Database Engines via Graph-Based Oracle Construction

Authors:Jiang, ZM;Liu, S;Rigger, M;Su, ZD

Source:PROCEEDINGS OF THE 17TH USENIX SYMPOSIUM ON OPERATING SYSTEMS DESIGN AND IMPLEMENTATION, OSDI 2023 pages: 397-417.Published: 2023

第 4 条，共 8 条

**文献标题:**Checking Causal Consistency of MongoDB

**作者:**Ouyang, HR;Wei, HF;Li, HX;Pan, AQ;Huang, Y

**文献类型:**Article

**出版物名称:**JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY **卷:**37 **期:**1 **页数:**128-146 **DOI:**10.1007/s11390-021-1662-8 **出版年:**FEB 2022

**入藏号:**WOS:000757837300008

**作者地址:**[Ouyang, Hong-Rong; Wei, Heng-Feng; Huang, Yu] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Peoples R China. [Wei, Heng-Feng] Nanjing Univ, Software Inst, Nanjing 210093, Peoples R China. [Li, Hai-Xiang; Pan, An-Qun] Tencent Inc, Tencent Distributed SQL Team Technol & Engn Grp T, Shenzhen 518054, Peoples R China. C3 Nanjing University; Nanjing University; Tencent

**通讯作者地址:**Wei, HF (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Peoples R China.; Wei, HF (通讯作者)，Nanjing Univ, Software Inst, Nanjing 210093, Peoples R China.; Li, HX (通讯作者)，Tencent Inc, Tencent Distributed SQL Team Technol & Engn Grp T, Shenzhen 518054, Peoples R China.

**电子邮件地址:**mf20330056@smail.nju.edu.cn; hfwei@nju.edu.cn; blueseali@tencent.com; aaronpan@tencent.com; yuhuang@nju.edu.cn

**国际标准期刊号 (ISSN):**10009000

该文献被引次数：0次

第 5 条，共 8 条

**文献标题:**Achieving Probabilistic Atomicity With Well-Bounded Staleness and Low Read Latency in Distributed Datastores

**作者:**Ouyang, LZ;Huang, Y;Wei, HF;Lu, J

**文献类型:**Article

**出版物名称:**IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS **卷:**32 **期:**4 **页数:**815-829 **DOI:**10.1109/TPDS.2020.3034328 **出版年:**APR 1 2021

**入藏号:**WOS:000591807700002

**作者地址:**[Ouyang, Lingzhi; Huang, Yu; Wei, Hengfeng; Lu, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Peoples R China. [Ouyang, Lingzhi; Huang, Yu; Wei, Hengfeng; Lu, Jian] Nanjing Univ, Dept Comp Sci & Technol, Nanjing 210023, Peoples R China. C3 Nanjing University; Nanjing University

**通讯作者地址:**Ouyang, LZ (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Peoples R China.; Ouyang, LZ (通讯作者)，Nanjing Univ, Dept Comp Sci & Technol, Nanjing 210023, Peoples R China.

**电子邮件地址:**lingzhi.ouyang@outlook.com; yuhuang@nju.edu.cn; hfwei@nju.edu.cn; lj@nju.edu.cn

**国际标准期刊号 (ISSN):**10459219

该文献被引次数：1次

5-1.Cross-organizational data exchange based on consortium blockchain with consistency guarantee

Authors:Geng, Q;Chuai, Z;Jin, J

Source:JOURNAL OF SUPERCOMPUTING, volume: 80 issue: 12 pages: 18199-18236.Published: AUG 2024

第 6 条，共 8 条

**文献标题:**Jupiter Made Abstract, and Then Refined

**作者:**Wei, HF;Tang, RZ;Huang, Y;Lv, J

**文献类型:**Article

**出版物名称:**JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY **卷:**35 **期:**6 **页数:**1343-1364 **DOI:**10.1007/s11390-020-0516-0 **出版年:**NOV 2020

**入藏号:**WOS:000596524900008

**作者地址:**[Wei, Heng-Feng; Tang, Rui-Ze; Huang, Yu; Lv, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Peoples R China. C3 Nanjing University

**通讯作者地址:**Huang, Y (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Peoples R China.

**电子邮件地址:**hfwei@nju.edu.cn; tangruize97@gmail.com; yuhuang@nju.edu.cn; lj@nju.edu.cn

**国际标准期刊号 (ISSN):**10009000

该文献被引次数：1次

6-1.Checking Causal Consistency of MongoDB [自引文献]

Authors:Ouyang, HR;Wei, HF;Li, HX;Pan, AQ;Huang, Y

Source:JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY, volume: 37 issue: 1 pages: 128-146.Published: FEB 2022

第 7 条，共 8 条

**文献标题:**Probabilistically-Atomic 2-Atomicity: Enabling Almost Strong Consistency in Distributed Storage Systems

**作者:**Wei, HF;Huang, Y;Lu, J

**文献类型:**Article

**出版物名称:**IEEE TRANSACTIONS ON COMPUTERS **卷:**66 **期:**3 **页数:**502-514 **DOI:**10.1109/TC.2016.2601322 **出版年:**MAR 1 2017

**入藏号:**WOS:000395629500010

**作者地址:**[Wei, Hengfeng; Huang, Yu; Lu, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Jiangsu, Peoples R China. C3 Nanjing University

**通讯作者地址:**Wei, HF (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Jiangsu, Peoples R China.

**电子邮件地址:**hengxin0912@gmail.com; yuhuang@nju.edu.cn; lj@nju.edu.cn

**国际标准期刊号 (ISSN):**00189340

该文献被引次数：3次

7-1.Achieving Probabilistic Atomicity With Well-Bounded Staleness and Low Read Latency in Distributed Datastores [自引文献]

Authors:Ouyang, LZ;Huang, Y;Wei, HF;Lu, J

Source:IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS, volume: 32 issue: 4 pages: 815-829.Published: APR 1 2021

7-2.IO dependent SSD cache allocation for elastic Hadoop applications

Authors:Tang, Z;Wang, W;Sun, L;Huang, Y;Wu, H;Wei, J;Huang, T

Source:SCIENCE CHINA-INFORMATION SCIENCES, volume: 61 issue: 5Published: MAY 2018

7-3.A Novel Pre-fetching Strategy of Memory Object Caching System

Authors:Liu, JW;Li, DD;Yuan, CZ;Liu, H;Tang, Y

Source:12TH CHINESE CONFERENCE ON COMPUTER SUPPORTED COOPERATIVE WORK AND SOCIAL COMPUTING (CHINESECSCW 2017) pages: 115-121.Published: 2017

第 8 条，共 8 条

**文献标题:**Verifying Pipelined-RAM Consistency over Read/Write Traces of Data Replicas

**作者:**Wei, HF;De Biasi, M;Huang, Y;Cao, JN;Lu, J

**文献类型:**Article

**出版物名称:**IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS **卷:**27 **期:**5 **页数:**1511-1523 **DOI:**10.1109/TPDS.2015.2453985 **出版年:**MAY 2016

**入藏号:**WOS:000374238100021

**作者地址:**[Wei, Hengfeng; Huang, Yu; Lu, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210008, Jiangsu, Peoples R China. [De Biasi, Marzio] Puzzles & Machines Org, Computat Complex, Milan, Italy. [Cao, Jiannong] Hong Kong Polytech Univ, Hong Kong, Hong Kong, Peoples R China. C3 Nanjing University; Hong Kong Polytechnic University

**通讯作者地址:**Wei, HF; Huang, Y; Lu, J (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210008, Jiangsu, Peoples R China.; De Biasi, M (通讯作者)，Puzzles & Machines Org, Computat Complex, Milan, Italy.; Cao, JN (通讯作者)，Hong Kong Polytech Univ, Hong Kong, Hong Kong, Peoples R China.

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**国际标准期刊号 (ISSN):**10459219

该文献被引次数：4次

8-1.Checking Causal Consistency of MongoDB [自引文献]

Authors:Ouyang, HR;Wei, HF;Li, HX;Pan, AQ;Huang, Y

Source:JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY, volume: 37 issue: 1 pages: 128-146.Published: FEB 2022

8-2.Incremental Causal Consistency Checking for Read-Write Memory Histories [自引文献]

Authors:Huang, Y;Wei, HF

Source:13TH ASIA-PACIFIC SYMPOSIUM ON INTERNETWARE, INTERNETWARE 2022 pages: 181-191.Published: 2022

8-3.Checking Causal Consistency of MongoDB [自引文献]

Authors:Ouyang, HR;Wei, HF;Huang, Y

Source:THE 12TH ASIA-PACIFIC SYMPOSIUM ON INTERNETWARE, INTERNETWARE 2020 pages: 209-216.Published: 2021

8-4.IO dependent SSD cache allocation for elastic Hadoop applications

Authors:Tang, Z;Wang, W;Sun, L;Huang, Y;Wu, H;Wei, J;Huang, T

Source:SCIENCE CHINA-INFORMATION SCIENCES, volume: 61 issue: 5Published: MAY 2018

十、魏恒峰CPCI-S收录的研究论文被WOS引用的情况

第 1 条，共 11 条

**文献标题:**Efficient Black-box Checking of Snapshot Isolation in Databases

**作者:**Huang, KL;Liu, S;Chen, ZG;Wei, HF;Basin, D;Li, HX;Pan, AQ

**文献类型:**Article; Proceedings Paper

**出版物名称:**PROCEEDINGS OF THE VLDB ENDOWMENT **卷:**16 **期:**6 **页数:**1264-1276 **DOI:**10.14778/3583140.3583145 **出版年:**FEB 2023

**入藏号:**WOS:000992408800006

**作者地址:**[Huang, Kaile; Chen, Zhenge; Wei, Hengfeng] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. [Liu, Si; Basin, David] Swiss Fed Inst Technol, Zurich, Switzerland. [Li, Haixiang; Pan, Anqun] Tencent Inc, Shenzhen, Peoples R China. [Wei, Hengfeng] Nanjing Univ, Software Inst, Nanjing, Peoples R China. C3 Nanjing University; Swiss Federal Institutes of Technology Domain; ETH Zurich; Tencent; Nanjing University

**通讯作者地址:**Wei, HF (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China.

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**会议标题:**49th International Conference on Very Large Data Bases (VLDB) **会议日期:**AUG 28-SEP 01, 2023 **会议地点:**Vancouver, CANADA

**国际标准期刊号 (ISSN):**21508097

该文献被引次数：5次

1-1.Checking Transaction Isolation Violations Using Graph Queries

Authors:Dumbrava, S;Jin, Z;Ozkan, BK;Qiu, JX

Source:GRAPH TRANSFORMATION, ICGT 2024, volume: 14774 pages: 203-213.Published: 2024

1-2.Plume: Efficient and Complete Black-Box Checking of Weak Isolation Levels [自引文献]

Authors:Liu, S;Gu, L;Wei, HF;Basin, D

Source:PROCEEDINGS OF THE ACM ON PROGRAMMING LANGUAGES-PACMPL, volume: 8 issue: OOPSLAPublished: OCT 2024

1-3.IsoVista: Black-box Checking Database Isolation Guarantees [自引文献]

Authors:Gu, L;Liu, S;Xing, TC;Wei, HF;Chen, YX;Basin, D

Source:PROCEEDINGS OF THE VLDB ENDOWMENT, volume: 17 issue: 12 pages: 4325-4328.Published: AUG 2024

1-4.TDSQL: Tencent Distributed Database System

Authors:Chen, YX;Pan, A;Lei, HL;Ye, A;Han, S;Tang, Y;Lu, W;Chai, YP;Zhang, F;Du, XY

Source:PROCEEDINGS OF THE VLDB ENDOWMENT, volume: 17 issue: 12 pages: 3869-3882.Published: AUG 2024

1-5.Detecting Transactional Bugs in Database Engines via Graph-Based Oracle Construction

Authors:Jiang, ZM;Liu, S;Rigger, M;Su, ZD

Source:PROCEEDINGS OF THE 17TH USENIX SYMPOSIUM ON OPERATING SYSTEMS DESIGN AND IMPLEMENTATION, OSDI 2023 pages: 397-417.Published: 2023

第 2 条，共 11 条

**文献标题:**Tunable Causal Consistency: Specification and Implementation

**作者:**Jiang, X;Wei, HF;Huang, Y

**文献类型:**Proceedings Paper

**出版物名称:**2022 IEEE 28TH INTERNATIONAL CONFERENCE ON PARALLEL AND DISTRIBUTED SYSTEMS, ICPADS **页数:**169-176 **DOI:**10.1109/ICPADS56603.2022.00030 **出版年:**2022

**入藏号:**WOS:000983289900022

**作者地址:**[Jiang, Xue; Wei, Hengfeng; Huang, Yu] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. C3 Nanjing University

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**会议标题:**IEEE 28th International Conference on Parallel and Distributed Systems (IEEE ICPADS) **会议日期:**JAN 10-12, 2023 **会议地点:**Nanjing, PEOPLES R CHINA

**国际标准期刊号 (ISSN):**15219097

该文献被引次数：0次

第 3 条，共 11 条

**文献标题:**Incremental Causal Consistency Checking for Read-Write Memory Histories

**作者:**Huang, Y;Wei, HF

**文献类型:**Proceedings Paper

**出版物名称:**13TH ASIA-PACIFIC SYMPOSIUM ON INTERNETWARE, INTERNETWARE 2022 **页数:**181-191 **DOI:**10.1145/3545258.3545262 **出版年:**2022

**入藏号:**WOS:001086087500020

**作者地址:**[Huang, Yi] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. [Wei, Hengfeng] Nanjing Univ, State Key Lab Novel Software Technol, Software Inst, Nanjing, Peoples R China. C3 Nanjing University; Nanjing University

**通讯作者地址:**Huang, Y (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China.

**电子邮件地址:**yi.huang.njucs@outlook.com; hfwei@nju.edu.cn

**会议标题:**13th Asia-Pacific Symposium on Internetware (Internetware) - A Software Paradigm for Internet Computing **会议日期:**JUN 11-12, 2022 **会议地点:**ELECTR NETWORK

该文献被引次数：0次

第 4 条，共 11 条

**文献标题:**UNISTORE: A fault-tolerant marriage of causal and strong consistency

**作者:**Bravo, M;Gotsman, A;de Régil, B;Wei, HF

**文献类型:**Proceedings Paper

**出版物名称:**PROCEEDINGS OF THE 2021 USENIX ANNUAL TECHNICAL CONFERENCE **页数:**923-937 **出版年:**2021

**入藏号:**WOS:000696708600061

**作者地址:**[Bravo, Manuel; Gotsman, Alexey; de Regil, Borja] IMDEA Software Inst, Madrid, Spain. [Wei, Hengfeng] Nanjing Univ, Nanjing, Jiangsu, Peoples R China. [Wei, Hengfeng] Software Inst, State Key Lab Novel Software Technol, Nanjing, Jiangsu, Peoples R China. C3 IMDEA Software Institute; Nanjing University

**通讯作者地址:**Bravo, M (通讯作者)，IMDEA Software Inst, Madrid, Spain.

**会议标题:**USENIX Annual Technical Conference / 15th USENIX Symposium on Operating Systems Design and Implementation (OSDI) **会议日期:**JUL 14-16, 2021 **会议地点:**ELECTR NETWORK

该文献被引次数：3次

4-1.Edge AI-driven neural network predictions for replica sync optimization

Authors:Xu, ZC;Dong, YC;Lou, JS;Wang, YY;Fu, Y

Source:APPLIED SOFT COMPUTING, volume: 165Published: NOV 2024

4-2.Reconciling Earlier Snapshot Time With Local Cache for Optimal Performance Under Transactional Causal Consistency

Authors:Mo, TQ;Li, RF;Duan, S

Source:IEEE TRANSACTIONS ON SERVICES COMPUTING, volume: 16 issue: 1 pages: 537-549.Published: JAN 1 2023

4-3.Transactional Causal Consistent Microservices Simulator

Authors:Pereira, P;Silva, AR

Source:DISTRIBUTED APPLICATIONS AND INTEROPERABLE SYSTEMS, DAIS 2023, volume: 13909 pages: 57-73.Published: 2023

第 5 条，共 11 条

**文献标题:**Checking Causal Consistency of MongoDB

**作者:**Ouyang, HR;Wei, HF;Huang, Y

**文献类型:**Proceedings Paper

**出版物名称:**THE 12TH ASIA-PACIFIC SYMPOSIUM ON INTERNETWARE, INTERNETWARE 2020 **页数:**209-216 **DOI:**10.1145/3457913.3457928 **出版年:**2021

**入藏号:**WOS:001143154800023

**作者地址:**[Ouyang, Hongrong; Wei, Hengfeng; Huang, Yu] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. C3 Nanjing University

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**会议标题:**12th Asia-Pacific Symposium on Internetware (Internetware) - A Software Paradigm for Internet Computing **会议日期:**MAY 12-14, 2021 **会议地点:**ELECTR NETWORK

该文献被引次数：3次

5-1.Checking Causal Consistency of MongoDB [自引文献]

Authors:Ouyang, HR;Wei, HF;Li, HX;Pan, AQ;Huang, Y

Source:JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY, volume: 37 issue: 1 pages: 128-146.Published: FEB 2022

5-2.Towards automatic validation of composite heterogeneous systems in edge situations

Authors:Cerny, L

Source:2022 IEEE INTERNATIONAL SYMPOSIUM ON SOFTWARE RELIABILITY ENGINEERING WORKSHOPS (ISSREW 2022) pages: 118-121.Published: 2022

5-3.Incremental Causal Consistency Checking for Read-Write Memory Histories [自引文献]

Authors:Huang, Y;Wei, HF

Source:13TH ASIA-PACIFIC SYMPOSIUM ON INTERNETWARE, INTERNETWARE 2022 pages: 181-191.Published: 2022

第 6 条，共 11 条

**文献标题:**A Generic Specification Framework for Weakly Consistent Replicated Data Types

**作者:**Jiang, X;Wei, HF;Huang, Y

**文献类型:**Proceedings Paper

**出版物名称:**2020 INTERNATIONAL SYMPOSIUM ON RELIABLE DISTRIBUTED SYSTEMS (SRDS 2020) **页数:**143-154 **DOI:**10.1109/SRDS51746.2020.00022 **出版年:**2020

**入藏号:**WOS:000646196200015

**作者地址:**[Jiang, Xue; Wei, Hengfeng; Huang, Yu] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China. C3 Nanjing University

**通讯作者地址:**Jiang, X (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Peoples R China.

**电子邮件地址:**xuejiang1225@gmail.com; hfwei@nju.edu.cn; yuhuang@nju.edu.cn

**会议标题:**39th International Symposium on Reliable Distributed Systems (SRDS) **会议日期:**SEP 21-24, 2020 **会议地点:**Shanghai, PEOPLES R CHINA

**国际标准期刊号 (ISSN):**10609857

该文献被引次数：1次

6-1.Tunable Causal Consistency: Specification and Implementation [自引文献]

Authors:Jiang, X;Wei, HF;Huang, Y

Source:2022 IEEE 28TH INTERNATIONAL CONFERENCE ON PARALLEL AND DISTRIBUTED SYSTEMS, ICPADS pages: 169-176.Published: 2022

第 7 条，共 11 条

**文献标题:**Brief Announcement: Specification and Implementation of Replicated List: The Jupiter Protocol Revisited

**作者:**Wei, HF;Huang, Y;Lu, J

**文献类型:**Proceedings Paper

**出版物名称:**PODC'18: PROCEEDINGS OF THE 2018 ACM SYMPOSIUM ON PRINCIPLES OF DISTRIBUTED COMPUTING **页数:**81-83 **DOI:**10.1145/3212734.3212778 **出版年:**2018

**入藏号:**WOS:000458186900010

**作者地址:**[Wei, Hengfeng; Huang, Yu; Lu, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Jiangsu, Peoples R China. C3 Nanjing University

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**会议标题:**37th ACM SIGACT-SIGOPS Symposium on Principles of Distributed Computing (PODC) **会议日期:**JUL 23-27, 2018 **会议地点:**Royal Holloway Univ London, Egham, ENGLAND

该文献被引次数：3次

7-1.Systematic Literature Review of MBSE Tool-Chains

Authors:Ma, JD;Wang, GX;Lu, JZ;Vangheluwe, H;Kiritsis, D;Yan, Y

Source:APPLIED SCIENCES-BASEL, volume: 12 issue: 7Published: APR 2022

7-2.The dynamic control method of the weight cargo transported lifting machinery

Authors:Egorov, AV;Dorohin, SV;Lysyannikov, AV;Kaizer, YF;Kuznetsov, AV;Lysyannikova, NN;Tyukanov, VL;Shram, VG

Source:INTERNATIONAL SCIENTIFIC CONFERENCE ON APPLIED PHYSICS, INFORMATION TECHNOLOGIES AND ENGINEERING (APITECH-2019), volume: 1399Published: 2019

7-3.Towards A Service-oriented Framework for MBSE Tool-chain Development

Authors:Lu, JZ;Chen, DJ;Wang, J;Torngren, M

Source:2018 13TH ANNUAL CONFERENCE ON SYSTEM OF SYSTEMS ENGINEERING (SOSE) pages: 568-575.Published: 2018

第 8 条，共 11 条

**文献标题:**Parameterized and Runtime-tunable Snapshot Isolation in Distributed Transactional Key-value Stores

**作者:**Wei, HF;Huang, Y;Lu, J

**文献类型:**Proceedings Paper

**出版物名称:**2017 IEEE 36TH INTERNATIONAL SYMPOSIUM ON RELIABLE DISTRIBUTED SYSTEMS (SRDS) **页数:**21-33 **DOI:**10.1109/SRDS.2017.11 **出版年:**2017

**入藏号:**WOS:000425924600003

**作者地址:**[Wei, Hengfeng; Huang, Yu; Lu, Jian] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Jiangsu, Peoples R China. C3 Nanjing University

**通讯作者地址:**Wei, HF (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing, Jiangsu, Peoples R China.

**电子邮件地址:**hfwei@nju.edu.cn; yuhuang@nju.edu.cn; lj@nju.edu.cn

**会议标题:**36th IEEE Symposium on Reliable Distributed Systems (SRDS) **会议日期:**SEP 26-29, 2017 **会议地点:**Hong Kong, HONG KONG

**国际标准期刊号 (ISSN):**10609857

该文献被引次数：17次

8-1.Population-Scale CT-based Body Composition Analysis of a Large Outpatient Population Using Deep Learning to Derive Age-, Sex-, and Race-specific Reference Curves

Authors:Magudia, K;Bridge, CP;Bay, CP;Babic, A;Fintelmann, FJ;Troschel, FM;Miskin, N;Wrobel, WC;Brais, LK;Andriole, KP;Wolpin, BM;Rosenthal, MH

Source:RADIOLOGY, volume: 298 issue: 2 pages: 319-329.Published: FEB 2021

8-2.An Improved Faster R-CNN Method to Detect Tailings Ponds from High-Resolution Remote Sensing Images

Authors:Yan, DC;Li, GQ;Li, XQ;Zhang, H;Lei, H;Lu, KX;Cheng, MH;Zhu, FX

Source:REMOTE SENSING, volume: 13 issue: 11Published: JUN 2021

8-3.Review and Evaluation of Deep Learning Architectures for Efficient Land Cover Mapping with UAS Hyper-Spatial Imagery: A Case Study Over a Wetland

Authors:Pashaei, M;Kamangir, H;Starek, MJ;Tissot, P

Source:REMOTE SENSING, volume: 12 issue: 6Published: MAR 2020

8-4.Few-Shot Personalized Saliency Prediction Based on Adaptive Image Selection Considering Object and Visual Attention

Authors:Moroto, Y;Maeda, K;Ogawa, T;Haseyama, M

Source:SENSORS, volume: 20 issue: 8Published: APR 2020

8-5.Improving Augmented Human Intelligence to Distinguish Burkitt Lymphoma From Diffuse Large B-Cell Lymphoma Cases

Authors:Mohlman, JS;Leventhal, SD;Hansen, T;Kohan, J;Pascucci, V;Salama, ME

Source:AMERICAN JOURNAL OF CLINICAL PATHOLOGY, volume: 153 issue: 6 pages: 743-759.Published: JUN 2020

8-6.2PC\*: a distributed transaction concurrency control protocol of multi-microservice based on cloud computing platform

Authors:Fan, P;Liu, J;Yin, W;Wang, H;Chen, XH;Sun, HY

Source:JOURNAL OF CLOUD COMPUTING-ADVANCES SYSTEMS AND APPLICATIONS, volume: 9 issue: 1Published: JUL 23 2020

8-7.Estimation of the Gender Ratio of Chickens Based on Computer Vision: Dataset and Exploration

Authors:Yao, YZ;Yu, HY;Mu, J;Li, J;Pu, HB

Source:ENTROPY, volume: 22 issue: 7Published: JUL 2020

8-8.Advances and Trends in Real Time Visual Crowd Analysis

Authors:Khan, K;Albattah, W;Khan, RU;Qamar, AM;Nayab, D

Source:SENSORS, volume: 20 issue: 18Published: SEP 2020

8-9.Detection of Undocumented Building Constructions from Official Geodata Using a Convolutional Neural Network

Authors:Li, QY;Shi, YL;Auer, S;Roschlaub, R;Möst, K;Schmitt, M;Glock, C;Zhu, XX

Source:REMOTE SENSING, volume: 12 issue: 21Published: NOV 2020

8-10.A Slimmer Network with Polymorphic and Group Attention Modules for More Efficient Object Detection in Aerial Images

Authors:Guo, W;Li, WH;Li, ZH;Gong, WG;Cui, JK;Wang, XR

Source:REMOTE SENSING, volume: 12 issue: 22Published: NOV 2020

8-11.Sign Language Recognition Using Two-Stream Convolutional Neural Networks with Wi-Fi Signals

Authors:Lee, CC;Gao, ZJ

Source:APPLIED SCIENCES-BASEL, volume: 10 issue: 24Published: DEC 2020

8-12.Effect of <i>Bacillus</i> sp. DU-106 fermentation on <i>Dendrobium officinale</i> Chock for polysaccharide: Structure and immunoregulatory activities

Authors:Tian, WN;Dai, LW;Lu, SM;Luo, ZF;Qiu, ZY;Li, JJ;Li, P;Du, B

Source:INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES, volume: 135 pages: 1034-1042.Published: AUG 15 2019

8-13.Single Space Object Image Denoising and Super-Resolution Reconstructing Using Deep Convolutional Networks

Authors:Feng, XB;Su, XQ;Shen, JG;Jin, HM

Source:REMOTE SENSING, volume: 11 issue: 16Published: AUG 2019

8-14.Fully Automatic Segmentation of Acute Ischemic Lesions on Diffusion-Weighted Imaging Using Convolutional Neural Networks: Comparison with Conventional Algorithms

Authors:Woo, I;Lee, A;Jung, SC;Lee, H;Kim, N;Cho, SJ;Kim, D;Lee, J;Sunwoo, L;Kang, DW

Source:KOREAN JOURNAL OF RADIOLOGY, volume: 20 issue: 8 pages: 1275-1284.Published: AUG 2019

8-15.FSRFNet: Feature-selective and Spatial Receptive Fields Networks

Authors:Ma, XH;Yang, ZK;Yu, ZA

Source:APPLIED SCIENCES-BASEL, volume: 9 issue: 19Published: OCT 2019

8-16.FFESSD: An Accurate and Efficient Single-Shot Detector for Target Detection

Authors:Shi, WX;Bao, SL;Tan, DL

Source:APPLIED SCIENCES-BASEL, volume: 9 issue: 20Published: OCT 2019

8-17.Structural Building Damage Detection with Deep Learning: Assessment of a State-of-the-Art CNN in Operational Conditions

Authors:Nex, F;Duarte, D;Tonolo, FG;Kerle, N

Source:REMOTE SENSING, volume: 11 issue: 23Published: DEC 1 2019

第 9 条，共 11 条

**文献标题:**Enabling Mobile Device Coordination over Distributed Shared Memory

**作者:**Huang, MS;Wei, HF;Huang, Y

**文献类型:**Proceedings Paper

**出版物名称:**2016 IEEE 22ND INTERNATIONAL CONFERENCE ON PARALLEL AND DISTRIBUTED SYSTEMS (ICPADS) **页数:**64-71 **DOI:**10.1109/ICPADS.2016.16 **出版年:**2016

**入藏号:**WOS:000393188800009

**作者地址:**[Huang, Maosen; Wei, Hengfeng; Huang, Yu] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Jiangsu, Peoples R China. C3 Nanjing University

**通讯作者地址:**Wei, HF (通讯作者)，Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Jiangsu, Peoples R China.

**电子邮件地址:**csmaosenhuang@qq.com; hengxin0912@gmail.com; yuhuang@nju.edu.cn

**会议标题:**22nd IEEE International Conference on Parallel and Distributed Systems (ICPADS) **会议日期:**DEC 13-16, 2016 **会议地点:**Wuhan, PEOPLES R CHINA

**国际标准期刊号 (ISSN):**15219097

该文献被引次数：0次

第 10 条，共 11 条

**文献标题:**Fine-grained Delta Privacy Preservation for Hierarchical Contexts

**作者:**Jiang, X;Huang, Y;Wei, HF

**文献类型:**Proceedings Paper

**出版物名称:**2016 INT IEEE CONFERENCES ON UBIQUITOUS INTELLIGENCE & COMPUTING, ADVANCED & TRUSTED COMPUTING, SCALABLE COMPUTING AND COMMUNICATIONS, CLOUD AND BIG DATA COMPUTING, INTERNET OF PEOPLE, AND SMART WORLD CONGRESS (UIC/ATC/SCALCOM/CBDCOM/IOP/SMARTWORLD) **页数:**261-268 **DOI:**10.1109/UIC-ATC-ScalCom-CBDCom-IoP-SmartWorld.2016.17 **出版年:**2016

**入藏号:**WOS:000393306500034

**作者地址:**[Jiang, Xue; Huang, Yu; Wei, Hengfeng] Nanjing Univ, State Key Lab Novel Software Technol, Nanjing 210023, Jiangsu, Peoples R China. C3 Nanjing University

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**电子邮件地址:**xuejiang1225@gmail.com; yuhuang@nju.edu.cn; hengxin0912@gmail.com

**会议标题:**Conference on UIC/ATC/ScalCom/CBDCom/IoP/SmartWorld **会议日期:**JUL 18-21, 2016 **会议地点:**Toulouse, FRANCE

该文献被引次数：2次

10-1.Accurate Positioning Siamese Network for Real-Time Object Tracking

Authors:Zhou, LJ;Yao, XW;Zhang, JL

Source:IEEE ACCESS, volume: 7 pages: 84209-84216.Published: 2019

10-2.Enhance the recognition ability to occlusions and small objects with Robust Faster R-CNN

Authors:Zhou, T;Li, ZX;Zhang, CL

Source:INTERNATIONAL JOURNAL OF MACHINE LEARNING AND CYBERNETICS, volume: 10 issue: 11 pages: 3155-3166.Published: NOV 2019

第 11 条，共 11 条

**文献标题:**Formal Specification and Runtime Detection of Temporal Properties for Asynchronous Context

**作者:**Wei, HF;Huang, Y;Cao, JN;Ma, XX;Lu, J

**文献类型:**Proceedings Paper

**出版物名称:**2012 IEEE INTERNATIONAL CONFERENCE ON PERVASIVE COMPUTING AND COMMUNICATIONS (PERCOM) **页数:**30-38 **出版年:**2012

**入藏号:**WOS:000309103700005

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**会议标题:**10th IEEE International Conference on Pervasive Computing and Communications (PerCom) **会议日期:**MAR 19-23, 2012 **会议地点:**Univ Appl Sci & Arts So Switzerland (SUPSI), Lugano, SWITZERLAND

**国际标准期刊号 (ISSN):**24742503

该文献被引次数：19次

11-1.Bi-Objective green vehicle routing problem minimizing carbon emissions and maximizing service level

Authors:Kabadurmus, Ö;Erdogan, MS

Source:JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, volume: 38 issue: 1 pages: 103-112.Published: 2023

11-2.A green vehicle routing problem with multi-depot, multi-tour, heterogeneous fleet and split deliveries: a mathematical model and heuristic approach

Authors:Kabadurmus, O;Erdogan, MS

Source:JOURNAL OF COMBINATORIAL OPTIMIZATION, volume: 45 issue: 3Published: APR 2023

11-3.Environment-Friendly School Bus Routing Problem With Heterogeneous Fleet: A Large-Scale Real Case

Authors:Hulagu, S;Celikoglu, HB

Source:IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, volume: 23 issue: 4 pages: 3461-3471.Published: APR 2022

11-4.A Study on Green Two Echelon Vehicle Routing Problem with Simultaneous Pickup and Delivery

Authors:Yildiz, EA;Altiparmak, F

Source:PROCEEDINGS OF THE SIXTEENTH INTERNATIONAL CONFERENCE ON MANAGEMENT SCIENCE AND ENGINEERING MANAGEMENT - VOL 1, volume: 144 pages: 778-793.Published: 2022

11-5.MULTI-OBJECTIVE OPTIMIZATION OF A SORTING SYSTEM

Authors:Smit, A;Adan, J;Deenen, PC

Source:2020 WINTER SIMULATION CONFERENCE (WSC) pages: 1718-1729.Published: 2020

11-6.Study on Cold Chain Logistics with Time Windows Based on Carbon Emissions Considering Simultaneous Pick up and Distribution

Authors:Gong, MZ;Liu, S

Source:PROCEEDINGS OF 2019 8TH INTERNATIONAL CONFERENCE ON INDUSTRIAL TECHNOLOGY AND MANAGEMENT (ICITM 2019) pages: 301-305.Published: 2019

11-7.Branch and Price and Cut for the Split-Delivery Vehicle Routing Problem with Time Windows and Linear Weight-Related Cost

Authors:Luo, ZX;Qin, H;Zhu, WB;Lim, A

Source:TRANSPORTATION SCIENCE, volume: 51 issue: 2 pages: 668-687.Published: MAY 2017

11-8.Predicate Detection in Asynchronous Distributed Systems: A Probabilistic Approach

Authors:Zhu, WP;Cao, JN;Raynal, M

Source:IEEE TRANSACTIONS ON COMPUTERS, volume: 65 issue: 1 pages: 173-186.Published: JAN 2016

11-9.Adaptive large neighborhood search heuristics for the vehicle routing problem with stochastic demands and weight-related cost

Authors:Luo, ZX;Qin, H;Zhang, DZ;Lim, A

Source:TRANSPORTATION RESEARCH PART E-LOGISTICS AND TRANSPORTATION REVIEW, volume: 85 pages: 69-89.Published: JAN 2016

11-10.Enabling Context-Awareness by Predicate Detection in Asynchronous Environments

Authors:Yang, YL;Huang, Y;Ma, XX;Lu, J

Source:IEEE TRANSACTIONS ON COMPUTERS, volume: 65 issue: 2 pages: 522-534.Published: FEB 2016

11-11.A dual-objective metaheuristic approach to solve practical pollution routing problem

Authors:Suzuki, Y

Source:INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS, volume: 176 pages: 143-153.Published: JUN 2016

11-12.A systematic review on the engineering of software for ubiquitous systems

Authors:Guinea, AS;Nain, G;Le Traon, Y

Source:JOURNAL OF SYSTEMS AND SOFTWARE, volume: 118 pages: 251-276.Published: AUG 2016

11-13.Vehicle Routing Problem with Simultaneous Pickups and Deliveries and Time Windows Considering Fuel Consumption and Carbon Emissions

Authors:Hao, G;Gou, ZJ;Yang, P;Sun, JQ

Source:PROCEEDINGS OF THE 28TH CHINESE CONTROL AND DECISION CONFERENCE (2016 CCDC) pages: 3000-3005.Published: 2016

11-14.Vehicles Assignment With Over-Emission Intensity Considerations: A Perspective on Integrating the Market Mechanism With Government Control

Authors:Wang, MZ;He, ZL;Choi, TM;Ali, MM

Source:IEEE ACCESS, volume: 4Published: 2016

11-15.City Vehicle Routing Problem (City VRP): A Review

Authors:Kim, G;Ong, YS;Heng, CK;Tan, PS;Zhang, NA

Source:IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, volume: 16 issue: 4 pages: 1654-1666.Published: AUG 2015

11-16.Design of a Sliding Window over Distributed and Asynchronous Event Streams

Authors:Yang, YL;Huang, Y;Cao, JN;Ma, XX;Lu, J

Source:IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS, volume: 25 issue: 10 pages: 2551-2560.Published: OCT 2014

11-17.A Formal Modeling for Exceptions in Context-Aware Systems

Authors:Yoon, TS;Choi, JH;Cho, ES;Helal, S

Source:2014 38TH ANNUAL IEEE INTERNATIONAL COMPUTER SOFTWARE AND APPLICATIONS CONFERENCE WORKSHOPS (COMPSACW 2014) pages: 734-739.Published: 2014

11-18.An Integrated Formal Model for Context-Aware Systems

Authors:Cho, ES;Yoon, TS;Choi, JH;Paik, JY;Helal, S

Source:2013 IEEE 37TH ANNUAL COMPUTER SOFTWARE AND APPLICATIONS CONFERENCE WORKSHOPS (COMPSACW) pages: 163-168.Published: 2013

11-19.A Lingustic Approach for Robustness in Context Aware Applications

Authors:Min, YM;Paik, JY;Cho, ES

Source:2012 9TH INTERNATIONAL CONFERENCE ON UBIQUITOUS INTELLIGENCE & COMPUTING AND 9TH INTERNATIONAL CONFERENCE ON AUTONOMIC & TRUSTED COMPUTING (UIC/ATC) pages: 24-31.Published: 2012

十一、魏恒峰CSCD收录的研究论文被CSCD引用的情况

第 1 条，共 3 条

**作者:**Gu Xiaosong;Wei Hengfeng;Qiao Lei;Huang Yu

**文献标题:**支持乱序执行的Raft协议

**文献类型:**Article

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1-1.Raft Protocol Testing Based on TLA+ Formal Specification

Authors:Wang Dong;Dou Wensheng;Gao Yu;Wu Chenao;Wei Jun;Huang Tao

Source:Journal of Software, volume: 35 issue: 12 pages: 5363-5381.Published: 2024

第 2 条，共 3 条

**作者:**Ji Ye;Wei Hengfeng;Huang Yu;Lu Jian

**文献标题:**CRDT协议的TLA+描述与验证

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2-1.Raft Protocol Testing Based on TLA+ Formal Specification

Authors:Wang Dong;Dou Wensheng;Gao Yu;Wu Chenao;Wei Jun;Huang Tao

Source:Journal of Software, volume: 35 issue: 12 pages: 5363-5381.Published: 2024

2-2.Elsa:Coordination-free Distributed KVS for Cross-region Architecture

Authors:Cui Yulong;Fu Guo;Zhang Yanfeng;Yu Ge

Source:Journal of Software, volume: 34 issue: 5 pages: 2427-2445.Published: 2023

2-3.Formalization and Verification of Privacy Preserving Protocol Based on User Consent

Authors:Ma Li;Jiang Huowen;Peng Yun

Source:Acta Electronica Sinica, volume: 51 issue: 7 pages: 1842-1849.Published: 2023

2-4.Raft with Out-of-order Executions [自引文献]

Authors:Gu Xiaosong;Wei Hengfeng;Qiao Lei;Huang Yu

Source:Journal of Software, volume: 32 issue: 6 pages: 1748-1778.Published: 2021

第 3 条，共 3 条

**作者:**Yi Xingchen;Wei Hengfeng;Huang Yu;Qiao Lei;Lu Jian

**文献标题:**PaxosStore中共识协议TPaxos的推导、规约与精化

**文献类型:**Article

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3-1.Raft with Out-of-order Executions [自引文献]

Authors:Gu Xiaosong;Wei Hengfeng;Qiao Lei;Huang Yu

Source:Journal of Software, volume: 32 issue: 6 pages: 1748-1778.Published: 2021