Curriculum Vitae

Wei Wang

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Contact Information

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Education

PH.D.	Computer Science, University of Virginia, 2015
MASTER	Computer Science, University of Virginia, 2011
B.ENG.	Computer Science, University of Science and Technology of China, 2004

Appointments

2016 – PRESENT	Assistant Professor,
	Computer Science, University of Texas at San Antonio
2015 – 2016	Post-doctoral Research Associate and Lecturer,
	Computer Science,University of Virginia

Awards

A1 **UTSA President's Distinguished Achievement Award** in Research, 2023.

A2 **UTSA President's Distinguished Achievement Award** in Innovation and Impact, 2022.
Team (as lead) award with Dr. Kathy Ewoldt, Dr. Mimi Xie, and Dr. Alberto Mestas-Nunez.

A3 **ACM SIGSOFT Distinguished Paper Award** (ESEC/FSE'19), 2019

A4 Best Paper Presentation Award (in IGSC'19), 2019

A5 Outstanding Achievement in Teaching, UTSA, Dept. of Computer Science, 2019

A6 Outstanding Research Award, UVa, Dept. of Computer Science, 2014

A7 SIGPLAN PAC Professional Activities Grant, 2012

Research Interests

- Computer Systems (Cloud Computing, Computer Architecture, Compilers)

- Performance/Software Engineering

- Applied Artificial Intelligence

- Computer Science Education

Publications (citations: 705)

Conference Publications

Underscored are UTSA students.

C1 <u>Yuntong Zhang</u>, <u>Jingye Xu</u>, Mimi Xie, Dakai Zhu, Houbing Song, and Wei Wang. Efficient and Direct Inference of Heart Rate Variability using Both Signal Processing and Machine Learning. In *IEEE/ACM International Conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE)*, 2023. (Acceptance rate 22.3%)

C2 Hanmei Yang, Xin Zhao, Jin Zhou, Wei Wang, Sandip Kundu, Bo Wu, Hui Guan, and Tongping Liu. NUMAlloc: A Faster NUMA Memory Allocator. In *ACM SIGPLAN International Symposium on Memory Management (ISMM)*, 2023

C3 Wei Wang, Kathy Ewoldt, Mimi Xie, Alberto Mestas-Nunez, <u>Sean Soderman</u>, and Jeffrey Wang. Virtual Summer Camp for High School Students with Disabilities – An Experience Report. In *Proceedings of the 54th ACM Technical Symposium on Computer Science Education (**SIGCSE**)*, 2023. (Acceptance rate 35%. CSRankings Listed. Core Ranking A)

C4 <u>Yuntong Zhang</u>, <u>Jingye Xu</u>, Mimi Xie, Wei Wang, Keying Ye, Jing Wang, and Dakai Zhu. PPG-based Heart Rate Estimation with Efficient Sensor Sampling and Learning Models. In *IEEE International Conference on Embedded Software and Systems (ICESS)*, 2022 (Acceptance rate 30.6%)

C5 <u>Tianyi Liu</u>, <u>Sen He</u>, <u>Vinodh Kumaran Jayakumar</u>, and Wei Wang. A Cloud 3D Dataset and Application-Specific Learned Image Compression in Cloud 3D. In *European Conference on Computer Vision (**ECCV**)*, 2022 (Acceptance rate 28%, CSRankings Listed. Core Ranking A*)

C6 <u>Vinodh Kumaran Jayakumar</u>, Shivani Arbat, In Kee Kim, and Wei Wang. CloudBruno: A Low-Overhead Online Workload Prediction Framework for Cloud Computing . In *IEEE International Conference on Cloud Engineering (IC2E)*, 2022

C7 Kaustubh Rajendra Rajput, Chinmay Dilip Kulkarni, Byungjin Cho, Wei Wang, and In Kee Kim. EdgeFaaSBench: Benchmarking Edge Devices Using Serverless. In *IEEE International Conference on Edge Computing (IEEE EDGE)*, 2022 (Acceptance rate 28.5%)

C8 <u>Xue Li</u>, Peng Kang, Jordan Molone, Wei Wang, and Palden Lama. KneeScale: Efficient Resource Scaling for Serverless Computing at the Edge. In *2022 22nd IEEE International Symposium on Cluster, Cloud and Internet Computing (CCGrid)*, 2022 (Acceptance rate 24.8%. Core Ranking A)

C9 Shivani Arbat, <u>Vinodh Kumaran Jayakumar</u>, Jaewoo Lee, Wei Wang, and In Kee Kim. Wasserstein adversarial transformer for cloud workload prediction. *Proceedings of the AAAI Conference on Artificial Intelligence (**AAAI**)*, 36(11):12433–12439, Jun. 2022 (Acceptance rate 15.0%. CSRankings Listed)

C10 <u>Sen He</u>, <u>Tianyi Liu</u>, Palden Lama, Jaewoo Lee, In Kee Kim, and Wei Wang. Performance testing for cloud computing with dependent data bootstrapping. In *36th IEEE/ACM International Conference on Automated Software Engineering (**ASE**)*, 2021. (Acceptance rate 19.2%. Core Ranking A*)

C11 Jianwei Hao, Ting Jiang, Wei Wang, and In Kee Kim. An Empirical Analysis of VM Startup Times in Public IaaS Clouds. In *2021 IEEE 14th International Conference on Cloud Computing (IEEE CLOUD)*, 2021

C12 Xin Zhao, Jin Zhou, Hui Guan, Wei Wang, Xu Liu, and Tongping Liu. NumaPerf: Predictive NUMA Profiling. In *Proceedings of the ACM International Conference on Supercomputing (**ICS**)*, 2021 (Acceptance rate 25%. CSRankings Listed. Core Ranking A)

C13 <u>Tianyi</u> <u>Liu</u>, <u>Sen</u> <u>He</u>, <u>Sunzhou</u> <u>Huang</u>, <u>Danny</u> <u>Tsang</u>, Lingjia Tang, Jason Mars, and Wei Wang. A Benchmarking Framework for Interactive 3D Applications in the Cloud. In *53rd Annual IEEE/ACM International Symposium on Microarchitecture (**MICRO**)*, 2020 (Acceptance rate 18%. CSRankings Listed. Core Ranking A*)

C14 <u>Hamidreza</u> <u>Moradi</u>, Wei Wang, and Dakai Zhu. DiHi: Distributed and Hierarchical Performance Modeling of Multi-VM Cloud Running Applications. In *IEEE 22nd International Conference on High Performance Computing and Communications (HPCC)*, 2020 (Acceptance rate 15%. Core Ranking B)

C15 <u>Vinodh Kumaran</u> <u>Jayakumar</u>, Jaewoo Lee, In Kee Kim, and Wei Wang. A self-optimized generic workload prediction framework for cloud computing. In *IEEE International Parallel and Distributed Processing Symposium (**IPDPS**)*, 2020 (Acceptance rate 24.7%. Core Ranking A)

C16 <u>Hamidreza</u> <u>Moradi</u>, Wei Wang, Amanda Fernandez, and Dakai Zhu. uPredict: A User-Level Profiler-Based Predictive Framework in Multi-Tenant Clouds. In *IEEE International Conference on Cloud Engineering (IC2E)*, 2020

C17 <u>Sen</u> <u>He</u>, Glenna Manns, John Saunders, Wei Wang, Lori Pollock, and Mary Lou Soffa. A Statistics-Based Performance Testing Methodology for Cloud Applications. In *Proceedings of the 2019 27th ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering (**ESEC/FSE**), **ACM SIGSOFT Distinguished Paper Award***, 2019. Personal Contribution: 80%.

C18 <u>Hamidreza</u> <u>Moradi</u>, Wei Wang, and Dakai Zhu. Adaptive Performance Modeling and Prediction of Applications in Multi-Tenant Clouds. In *IEEE 21st International Conference on High Performance Computing and Communications (HPCC)*, 2019 (Acceptance rate 24.6%. Core Ranking B)

C19 <u>Corridon</u> <u>McKelvey</u>, <u>Richard</u> <u>Dreyer</u>, Donnel Zhu, Wei Wang, and John Quarles. Energy-Oriented Designs of an Augmented-Reality Application on a VUZIX Blade Smart Glass. In *International Green and Sustainable Computing Conference (IGSC), **Best Paper Presentation Award***, 2019

C20 In Kee Kim, Wei Wang, Yanjun Qi, and Marty Humphrey. CloudInsight: Utilizing a Council of Experts to Predict Future Cloud Application Workloads. In *IEEE 11th International Conference on Cloud Computing (IEEE CLOUD), **Best Student Paper Finalist***, 2018 (Acceptance rate 20%. Core Ranking B)

C21 <u>Rehana</u> <u>Begam</u>, <u>Hamidreza</u> <u>Moradi</u>, Wei Wang, and Dakai Zhu. Flexible VM Provisioning for Time-Sensitive Applications with Multiple Execution Options. In *IEEE 11th International Conference on Cloud Computing (IEEE CLOUD)*, 2018 (Acceptance rate 20%. Core Ranking B)

C22 In Kee Kim, Jinho Hwang, Wei Wang, and Marty Humphrey. Orchestra: Guaranteeing Performance SLAs for Cloud Applications by Avoiding Resource Storms. In *International Symposium on Parallel and Distributed Computing (ISPDC)*, 2018 (Core Ranking C)

C23 <u>Hongyu</u> <u>Liu</u>, <u>Sam</u> <u>Silvestro</u>, Wei Wang, Chen Tian, and Tongping Liu. IReplayer: In-Situ and Identical Record-and-Replay for Multithreaded Applications. In *Proceedings of the 39th ACM SIGPLAN Conference on Programming Language Design and Implementation (**PLDI**)*, New York, NY, USA, 2018. Association for Computing Machinery (Acceptance rate 17.8%, CSRankings Listed. Core Ranking A*))

C24 Wei Wang, Ningjing Tian, <u>Sunzhou</u> <u>Huang</u>, <u>Sen</u> <u>He</u>, Abhijeet Srivastava, Mary Lou Soffa, and Lori Pollock. Testing Cloud Applications under Cloud-Uncertainty Performance Effects. In *IEEE 11th International Conference on Software Testing, Verification and Validation (ICST)*, 2018 (Acceptance rate 25.2%. Core Ranking A)

C25 <u>Rehana</u> <u>Begam</u>, Wei Wang, and Dakai Zhu. Virtual Machine Provisioning for Applications with Multiple Deadlines in Resource-Constrained Clouds. In *IEEE 19th International Conference on High Performance Computing and Communications (HPCC)*, 2017 (Acceptance rate 35.2%. Core Ranking B)

C26 In Kee Kim, Wei Wang, Yanjun Qi, and Marty Humphrey. Empirical Evaluation of Workload Forecasting Techniques for Predictive Cloud Resource Scaling. In *IEEE 9th International Conference on Cloud Computing (IEEE CLOUD)*, 2016 (Acceptance rate 15%. Core Ranking B)

C27 Wei Wang, Jack W. Davidson, and Mary Lou Soffa. Predicting the Memory Bandwidth and Optimal Core Allocations for Multi-threaded Applications on Large-scale NUMA Machines. In *IEEE International Symposium on High Performance Computer Architecture (**HPCA**)*, 2016 (Acceptance rate 22%. CSRankings Listed. Core Ranking A*)

C28 In Kee Kim, Wei Wang, and Marty Humphrey. PICS: A Public IaaS Cloud Simulator. In *2015 IEEE 8th International Conference on Cloud Computing (IEEE CLOUD)*, 2015 (Acceptance rate 17%. Core Ranking B).

C29 Wei Wang, Tanima Dey, Jack W. Davidson, and Mary Lou Soffa. DraMon: Predicting Memory Bandwidth Usage of Multi-threaded Programs with High Accuracy and Low Overhead. In *IEEE 20th International Symposium on High Performance Computer Architecture (**HPCA**)*, 2014 (Acceptance rate 25.6%. CSRankings Listed. Core Ranking A*)

C30 Lingjia Tang, Jason Mars, Wei Wang, Tanima Dey, and Mary Lou Soffa. ReQoS: Reactive Static/Dynamic Compilation for QoS in Warehouse Scale Computers. In *Proceedings of the International Conference on Architectural Support for Programming Languages and Operating Systems (**ASPLOS**)*, 2013 (Acceptance rate 23%. CSRankings Listed. Core Ranking A*)

C31 Wei Wang, Tanima Dey, Jason Mars, Lingjia Tang, Jack W. Davidson, and Mary Lou Soffa. Performance analysis of thread mappings with a holistic view of the hardware resources. In *IEEE International Symposium on Performance Analysis of Systems and Software(ISPASS)*, 2012 (Acceptance rate 30.7%. Core Ranking B)

C32 Wei Wang, Tanima Dey, Ryan W. Moore, Mahmut Aktasoglu, Bruce R. Childers, Jack W. Davidson, Mary Jane Irwin, Mahmut Kandemir, and Mary Lou Soffa. REEact: A Customizable Virtual Execution Manager for Multicore Platforms. In *Proceedings of the 8th ACM*

SIGPLAN/SIGOPS Conference on Virtual Execution Environments (VEE), 2012 (Acceptance rate 37%. Core Ranking B)

C33 Tanima Dey, Wei Wang, Jack W. Davidson, and Mary Lou Soffa. Characterizing Multithreaded Applications based on Shared-resource Contention. In *IEEE International Symposium on Performance Analysis of Systems and Software (ISPASS)*, 2011 (Acceptance rate 37.5%. Core Ranking B)

Journal Publications

Underscored are UTSA students.

J1 Younghyun Koo, Hongjie Xie, Nathan T. Kurtz, Stephen F. Ackley, and Wei Wang. Sea Ice Surface Type Classification of ICESat-2 ATL07 Data by Using Data-driven Machine Learning Model: Ross Sea, Antarctic as An Example. *Remote Sensing of Environment*, 296:113726, 2023. Impact Factor: 13.5.

J2 Hamidreza Moradi, Wei Wang, and Dakai Zhu. Online Performance Modeling and Prediction for Single-VM Applications in Multi-Tenant Clouds. *IEEE Transactions on Cloud Computing (TCC)*, 2021. Impact Factor: 6.5.

J3 In Kee Kim, Jinho Hwang, Wei Wang, and Marty Humphrey. Guaranteeing Performance SLAs of Cloud Applications Under Resource Storms. *IEEE Transactions on Cloud Computing (TCC)*, 10(2):1329–1343, 2022. Impact Factor: 6.5.

J4 In Kee Kim, Wei Wang, Yanjun Qi, and Marty Humphrey. Forecasting Cloud Application Workloads with CloudInsight for Predictive Resource Management. *IEEE Transactions on Cloud Computing (TCC)*, 2020. Impact Factor: 6.5.

J5 Rehana Begam, Wei Wang, and Dakai Zhu. TIMER-Cloud: Time-Sensitive VM Provisioning in Resource-Constrained Clouds. *IEEE Transactions on Cloud Computing (TCC)*, 2020. Impact Factor: 6.5.

J6 Tanima Dey, Wei Wang, Jack W. Davidson, and Mary Lou Soffa. ReSense: Mapping Dynamic Workloads of Colocated Multithreaded Applications Using Resource Sensitivity. *ACM Transactions on Architecture and Code Optimization, (**TACO**)*, 10(4), dec 2013.

Workshop Publications

Underscored are UTSA students.

W1 Sen He, In Kee Kim, and Wei Wang. A Study of Java Microbenchmark Tail Latencies. In *Companion of the 2023 ACM/SPEC International Conference on Performance Engineering*, 2023

W2 Jurdana Masuma Iqrah, Younghyun Koo, Wei Wang, Hongjie Xie, and Sushil Prasad. Polar Sea-Ice Classification using Color-based Segmentation and Auto-labeling of Sentinel-2 Imagery to Train an Efficient Deep Learning Model. In *2nd Annual AAAI Workshop on AI to Accelerate Science and Engineering (AI2ASE)*, 2023

Press Coverages

1. "Breaking down Barriers for the Blind and Visually Impaired", UTSA Sombrilla, 2023

2. "Researchers at UTSA develop learning platform for students with disabilities with NSF funding", UTSA Today, 2022

3. "UTSA camp expands STEM opportunities for teens with disabilities", Kens5 News, 2021

4. "UTSA camp shows disabilities are no obstacle to enter STEM fields", UTSA Today, 2021

5. "Researcher builds solution to work-from-home cloud-computing "storms"", UTSA Today, 2020

Scholarly Presentations

Referred Presentations

1. "Virtual Summer Camp for High School Students with Disabilities – An Experience Report", the 54th ACM Technical Symposium on Computer Science Education, 2023, Toronto, Canada

2. "CloudBruno: A Low-Overhead Online Workload Prediction Framework for Cloud Computing", IEEE International Conference on Cloud Engineering, 2022, Pacific Grove, California, USA

Invited Presentations

1. "Google Cloud Champion Innovator Research Highlights" (poster), Google, 2023, Online

2. "Reliable Performance Testing for Multi-Tenant Clouds", SIAM Conference on Parallel Processing for Scientific Computing (PP), 2022, Online

Research and Education Grants

F1 **SCC-PG: Bridge: An AI-Enabled Platform to Support Coordinated Care for Children with Autism**, Senior Personnel Wei Wang, $149,999. PI Mimi Xie, co-PI Dakai Zhu, Leslie Neely, Mitra Bokaei Hosseini. National Science Foundation (NSF), *S&CC*, CMMI-2306596, 2023-2024.

F2 **Explore STEM**, co-PI Wei Wang, $26,403. PI Kathy Ewoldt, co-PI Leslie Neely. Texas Workforce Commission, 2023.

F3 **Collaborative Research: EAGER: Enhancing Security and Privacy of Augmented Reality Mobile Applications through Software Behavior Analysis**. PI Wei Wang, $150,000 (UTSA). co-PI Xiaoyin Wang (UTSA). In collaboration with Xusheng Xiao (ASU). National Science Foundation (NSF), *SaTC*, CNS-2221843, 2022-2024.

F4 **Collaborative Research: SHF: Small: Exploiting Performance Correlations for Accurate and Low-cost Performance Testing for Serverless Computing**. PI Wei Wang (lead institute), $329,334 (UTSA). In collaboration with Lori Pollock (UDel). National Science Foundation (NSF), *CISE CORE*, CCF-2155096, 2022-2025.

F5 **Enhancing Programming and Machine Learning Education for Students with Visual Impairments through the Use of Compilers, AI and Cloud Technologies**. PI Wei Wang, $770,939 (UTSA). co-PIs Kathy Ewoldt and Leslie Neely (UTSA). National Science Foundation (NSF), *RETTL*, IIS-2202632, 2022-2025.

F6 **An Educational Tool for Teaching and Learning Concurrent Computer Programming Techniques**. PI Wei Wang, $120,000 (UTSA). In collaboration with Tongping Liu and Andrew Lan (UMass). National Science Foundation (NSF), *IUSE*, DUE-2215359, 2022-2025.

F7 **Data Science and Engineering Curriculum Development**. co-PI Wei Wang, $50,000. PI Jianwei Niu. MITRE Corporation, 2022.

F8 **Explore STEM**, PI Wei Wang, $31,875. co-PIs Kathy Ewoldt and Palden Lama (UTSA). Texas Workforce Commission, 2022.

F9 **Data Science Boot Camp and Curriculum Development**, PI Wei Wang. $50,000. co-PI Jianwei Niu. National Security Agency (NSA), 2021.

F10 **Explore STEM**, PI Wei Wang, $83,336. co-PIs Kathy Ewoldt, Mimi Xie, and Alberto Mestas-Nunez (UTSA). Texas Workforce Commission, 2021.

F11 **Data Science Boot Camp and Curriculum Development**. PI Wei Wang, $46,650. co-PI Jianwei Niu. MITRE Corporation, 2021.

F12 **Data Science and Engineering Curriculum Development**. co-PI Wei Wang, $44,999. PI Jianwei Niu. MITRE Corporation, 2020.

F13 **Towards Statistical and Adaptive Learning in Edges for Smart Health Applications in Connected Communities with Security and Privacy Enforcements**, co-PI Wei Wang, $20,000. PI Dakai Zhu. UTSA, 2020.

F14 **Explore STEM**, PI Wei Wang, $33,119. Co-PI Kathy Ewoldt (UTSA). Texas Workforce Commission, 2020.

F15 **OIT Academic Support Solutions Fund Award**, PI Wei Wang, $9000, UTSA. 2019.

F16 **Google Cloud Research Fund**, PI Wei Wang, $5,000. Google, 2019.

F17 **SHF: SMALL: Collaborative Research: Cloud Mentoring: Guiding Cloud Users for Cost Performance through Testing and Recommendation**. Subaward PI Wei Wang, $100,100 (UTSA). In collaboration with Mary Lou Soffa (UVa) and Lori Pollock (UDel). National Science Foundation (NSF), *CISE CORE*, CCF-1617390, 2016-2020.

PATENTS

1. "Excessive Rendering Reduction for Cloud 3D", in application.

ORGANIZED COURSES

1. Computer Architecture (undergraduate), Fall18, Spring20, Spring21, Spring22, Fall22

2. Computer Architecture (graduate), Spring2019, Fall2019, Fall20, Fall21, Fall22, Fall23

3. Parallel Programming (undergraduate), Fall16, Spring19, Spring20, Spring23

4. Parallel Processing (graduate), Spring17, Spring19, Spring20

5. Programming Languages and Compilers (undergraduate), Spring18, Spring21

6. Analysis of Algorithms (graduate), Spring 17

Student Research Supervision

Ph.D. Dissertation Advisor (Students Completed)

1. Hamidreza Moradi. 2020. Title: User-level Profiler-based Predictive Framework for Applications in Multi-Tenant Clouds, co-advised with Dr. Dakai Zhu. First employment: Asst. Professor, University of Mississippi Medical Center.

2. Sen He. 2022. Title: Performance Testing for Cloud Computing. First employment: Asst. Professor, Augusta University.

3. Tianyi Liu. 2022. Title: Enabling 3D Applications in Public Cloud. First employment: Chinese Academy of Science.

Ph.D. Dissertation Advisor (In progress)

1. Vinodh Kumaran Jayakumar, from 2017, Cloud Resource Management with Automated Machine Learning

2. Yuntong Zhang, co-advising, from 2022, Smart Health,

3. God'salvation Oguibe, from 2022, CS Education and Applied AI

4. Shimul Debnath, from 2023, Cloud Native Computing

5. William Galindo, 2022-2023, Cloud Navtive Computing and CS Education

Master Student Research Advised

1. Tiffany Tsai, "Syntax Aware Screen Reader for Python Programming Language", 2022

2. LeVreese Davis, "Programming and Machine Learning Education for Students with Visual Impairments", 2022

3. Javier Guzman, "Programming the Quantum Future", 2020

4. Jerry Lucas, "Improving the Performance of an Open Source Cloud Gaming System", 2020

5. Aaron Bray, "Optimal Memory Allocation for Matrix Multiplication", 2019

6. Paul Nyugen, "Inspect Nvidia GTX-1080 memory hierachy to improve performance on big data computing", 2019

7. Rishi Kumar, "Cloud Gaming Benchmarking", 2019

8. Danny Tsang, "Cloud Gaming with Docker Containers", 2019

9. David Neathery, "Machine Learning in the Cloud", 2019

10. Sunzhou Huang, "Testing Cloud Applications under Cloud-Uncertainty Performance Effects", 2018

11. Jinay Jani, "Cloud Performance Testing", 2017

Undergraduate Student Research Advised

1. Jiaxing Li, Serverless Computing, 2022-Now

2. Arianna Acosta (Allamo Colleges), Learned Image Compression, 2022 Summer

3. Jaylin Wilson (Allamo Colleges), Polar Sea Ice Segmentation, 2021 Summer

4. Kevin Nguyen, Cloud Gaming Benchmarking, 2020 Fall

5. Nii Adjei (Allamo Colleges), Polar Sea Ice Segmentation, 2020 Summer

6. Haylie Schulmeier (Allamo Colleges), Polar Sea Ice Segmentation, 2020 Summer

7. Triston scallan, Cloud Gaming Benchmarking, 2019 Fall

8. Xin Nie, Cloud Performance Testing, 2017-2018

PROFESSIONAL SERVICES

Conference Program Committee Members

1. **SIGCSE'23 Poster**, ACM Technical Symposium on Computer Science Education

2. **ICPE'23**, The International Conference on Performance Engineering

3. **ICCD'21, '19,'18**, IEEE International Conference on Computer Design, Computer Systems Track, 2018, 2010, 2021

4. **SC'21**, International Symposium on Code Generation and OptimizationInternational Conference for High Performance Computing, Networking, Storage, and Analysis, 2021

5. **CGO'21**, International Symposium on Code Generation and Optimization, 2020

6. **CLOUD'19,'20**, International Conference on Cloud Computing, 2019, 2020

7. **CGP'17, '18**, International Conference on Green, Pervasive and Cloud Computing, 2017, 2018

8. **TrustComm'17**, IEEE International Conference On Trust, Security And Privacy In Computing And Communications, 2017

Journal Reviewers

1. **IEEE Transactions on Parallel and Distributed Systems (TPDS)**, Reviewing Board Member, 2018-now

2. **Future Generation Computer Systems (FGCS)**, 2017-Now

3. **Knowledge-Based Systems**, 2023-Now

4. **Journal of Network and Computer Applications (JNCA)**, 2023-Now

5. **IEEE Access**, 2020-Now

6. **IEEE Micro**, 2022

7. **Earth System Science Data**, 2022

8. **IEEE Transactions on Computers**, 2022

9. **IEEE Transactions on Cloud Computing (TCC)**, 2022

10. **ACM Transactions on Modeling and Performance Evaluation of Computing Systems (TOMPECS)**, 2021-2022

11. **ACM Transactions on Architecture and Code Optimization (TACO)**, 2021

12. **ACM Transactions on Software Engineering and Methodology (TOSEM)**, 2021

13. **Earth System Science Data (ESSD)**, 2020-2021

14. **IEEE Transaction on Big Data**, 2020-2021

15. **IEEE Transaction on Service Computing (TSC)**, 2020-2021

16. **Journal of Computer Sicence and Technology (JCST)**, 2017-2021

17. **Journal of Software: Evolution and Process**, 2021-2020

18. **Computer & Security (COSE)**, 2020-2021

19. **Computer Networks (COMNET)**, 2020

20. **Software: Practice and Experience (SPE)**, 2019-2020

21. **Cluster Computing (CLUS)**, 2018

22. **PLOS**, 2016

Proposal Panelist/Review

1. **US NSF Panelist**, 2023

2. **External Reviewer, Natural Sciences and Engineering Research Council of Canada**, 2022

3. **US NSF Panelist, Division of Computer and Network Systems (CNS)**, 2018

Other Services

1. **CIRCLS'23**, Center for Integrative Research in Computing and Learning Sciences Convening 23, Program Planning Committee.

2. **CPS-IoT Week**, Local co-chair.

3. **The First International Workshop on Virtual and Augmented Reality Software Engineering (VARSE)**, co-Chair.

4. **International Symposium on Code Generation and Optimization (2021)**, Session Chair

5. **IEEE Symposium on Computational Intelligence in Cyber Security (IEEE CICS)**, Publicity Chair

6. **IEEE International Conference on Cloud Computing (IEEE CLOUD'18)**, Conference Session Chair

7. **Artifact Evaluation for CGO-PPoPP**, Reviewer