

Daniel Wong

Associate Professor, Department of Electrical & Computer Engineering
Cooperating Faculty, Department of Computer Science & Engineering
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Research Interest

Computer Architecture, Energy-efficient Computing, Warehouse-scale Computing, General Purpose Graphical Processing Units, Microarchitecture, High-performance Computing

Education

- 2009
2015
PhD Electrical Engineering, *University of Southern California*, Los Angeles, CA.
Thesis: Energy Proportional Computing for Multi-core and Many-core Servers
Advisor: Murali Annavaram
Cumulative GPA: 4.0
- 2009
2011
MS Electrical Engineering, *University of Southern California*, Los Angeles, CA.
Cumulative GPA: 4.0
- 2006
2009
BS Computer Engineering/Computer Science, *University of Southern California*, Los Angeles, CA.
Cumulative GPA: 3.69 Major GPA: 3.74

Employment

- 2022
Associate Professor, *University of California, Riverside*, Riverside, CA.
Department of Electrical and Computer Engineering
Department of Computer Science and Engineering, Cooperating Faculty
Computer Engineering Program, Vice Chair and Graduate Advisor
- 2015
2022
Assistant Professor, *University of California, Riverside*, Riverside, CA.
Department of Electrical and Computer Engineering
Department of Computer Science and Engineering, Cooperating Faculty
Computer Engineering Program, Member
- 2014
Research Intern, *Samsung Semiconductor, Inc.*, Milpitas, CA.
Memory Solutions Lab, Mentor: Hongzhong Zheng, Suhas
Developed tools to enable performance and cost evaluation of emerging non-volatile memory system architectures.
- 2011
Computation Student Intern, *Lawrence Livermore National Lab*, Livermore, CA.
Mentor: Maya Gokhale
Contributed to early work on Perm, a C library dynamic-memory allocator for persistent heap management.
- 2010
Computation Student Intern, *Lawrence Livermore National Lab*, Livermore, CA.
Mentor: Maya Gokhale
Part of the Cyber Defenders program to explore new technologies that can be applied to computer security.

Awards and Honors

- NSF CAREER Award, 2021
- UC Regents' Faculty Fellowships, 2018
- IEEE Micro Top Picks from the Computer Architecture Conferences of 2012
- Provost's PhD Fellowship, University of Southern California, 2009-2013
- Rose Hills Undergraduate Summer Research Fellowship, 2009
- Rose Hills Foundation Scholarship, 2008

- Tau Beta Pi Honor Society, 2008
- Eta Kapp Nu (HKN) Honor Society, 2007

Research Funding

Extramural Funding

Total: ~\$4.0 million, PI: ~\$2.2M, My Share: ~\$1.8M

- NSF National Science Foundation, #2047521, 2021 - 2026
"CAREER: Towards Efficient Accelerated Cloud Data Centers",
Role: PI
Total: ~\$511K
- NSF National Science Foundation, #1955650, 2020 - 2024
"CNS Core: Medium: Real-time Energy-elastic GPUs for Embedded Autonomous Systems",
Role: PI, Co-PI: Nael Abu-Ghazaleh, Hyoseung Kim (UCR)
Total: ~\$1.2M, My share ~\$400K
REU Supplement: \$16K
- NSF National Science Foundation, #1815643, 2018 - 2022
"SHF: Small: Energy Saving in Heterogeneous Data Centers",
Role: PI, Co-PI: Laxmi Bhuyan (UCR)
Total: ~\$500K, My share ~\$250K
- CEC California Energy Commission, EPC-16-030, 2017 - 2021
"Enabling Energy Efficient Data Centers in Smart Power Distribution Systems",
Role: Co-PI, PI: Nanpeng Yu (UCR), Co-PI: Hyeran Jeon (UCM)
Total: ~\$1.8 million, My share ~\$650K

Intramural Funding

- UCR UCR-China Collaboration Fund, 2018-2019
"Innovation in Energy Efficiency",
Role: Co-PI, PI: Juchen Guo, Co-PI: Nanpeng Yu
Total: \$37,500, My share \$5K
- UCR Regents Faculty Fellowship, 2018 - 2019
Role: PI, Total: \$2,750
- UCR Omnibus Travel awards, 2016, 2018, 2019, 2020
Role: PI, Total: \$3,850

Gifts and Donations

- NVIDIA NVIDIA GeForce Titan X Pascal, ~\$1,200
- Intel HARP Access to Intel Xeon + FPGA cluster

Publications

Underlined names are students advised by me.

- HPCA '23 Marcus Chow, Ali Jahanshahi, **Daniel Wong**. *KRISP: Enabling Kernel-wise Right-sizing for Spatial Partitioned GPU Inference Servers*, In Proceedings of the 29th IEEE International Symposium on High Performance Computer Architecture (**HPCA**), 2023
- ACM TACO '22 Ali Jahanshahi, Nanpeng Yu, **Daniel Wong**. *PowerMorph: QoS-aware Server Power Reshaping for Data Center Regulation Service*, In ACM Transactions on Architecture and Code Optimization (**TACO**). Volume 19, Issue 3, September 2022
- ISPASS '22 Marcus Chow, Ali Jahanshahi, Ana Cardenas Beltran, Sheldon Tan, **Daniel Wong**. *GPUCalorie: Floorplan Estimation for GPU Thermal Evaluation*, In Proceedings of the IEEE International Symposium on Performance Analysis of Systems and Software (ISPASS), 2022. (Poster)

- GPGPU '22 Ali Jahanshahi, Marcus Chow, **Daniel Wong**. *Scaleserve: A Scalable Multi-GPU Machine Learning Inference System And Benchmarking Suite*, In Proceedings of the 14th Workshop on General Purpose Processing Using GPU (GPGPU), 2022. (Short paper)
- ISCA '21 Amirali Abdolrashidi, Hodjat Asghari Esfeden, Ali Jahanshahi, Kaustubh Singh, Nael Abu-Ghazaleh, **Daniel Wong**. *BlockMaestro: Enabling Programmer-Transparent Task-based Execution in GPU Systems* In Proceedings of the 48th ACM/IEEE International Symposium on Computer Architecture (**ISCA**), 2021.
- SC '21 Kiran Ranganath, Joshua D. Suetterlein, Joseph Manzano, Shuaiwen Leon Song, **Daniel Wong**. *MAPA: Multi-Accelerator Pattern Allocation Policy for Multi-Tenant GPU Servers* In Proceedings of the International Conference for High Performance Computing, Networking, Storage, and Analysis (**SC**), 2021.
- ACM TACO '21 Devashree Tripathy, Amirali Abdolrashidi, Laxmi N. Bhuyan, Liang Zhou, **Daniel Wong**. *PAVER: Locality Graph-based Thread Block Scheduling for GPUs*. ACM Transactions on Architecture and Code Optimization (**TACO**), Volume: 18, Issue: 3, June 2021.
- RSDHA '21 Marcus Chow, Kiran Ranganath, Robert Lerias Jr., Mika Shanela Carodan, **Daniel Wong**. *Energy Efficient Task Graph Execution Using Compute Unit Masking in GPUs*, In the SC21 Workshop on Redefining Scalability for Diversely Heterogeneous Architectures (**RSDHA**) 2021.
- LCPC '21 Kiran Ranganath, Jesun Firoz, Joshua Suetterlein, Joseph Manzano, Andres Marquez, Mark Raugas, **Daniel Wong**. *LC-MEMENTO: A Memory Model for Accelerated Architectures*, In the 34th International Workshop on Languages and Compilers for Parallel Computing (**LCPC**) 2021.
- NAS '21 Devashree Tripathy, Amirali Abdolrashidi, Quan Fan, **Daniel Wong** and Manoranjan Satpathy. *LocalityGuru: A PTX Analyzer for Extracting Thread Block-level Locality in GPGPUs* In Proceedings of the 15th International Conference on Networking, Architecture, and Storage (**NAS**), 2021.
- NAS '21 Hadi Zamani Sabzi, Devashree Tripathy, Ali Jahanshahi and **Daniel Wong**. *ICAP: Designing Inrush Current Aware Power Gating Switch for GPGPU* In Proceedings of the 15th International Conference on Networking, Architecture, and Storage (**NAS**), 2021.
- MICRO '20 Hodjat Asghari Esfeden, Amirali Abdolrashidi, Shafiur Rahman, **Daniel Wong**, Nael Abu-Ghazaleh. *BOW: Breathing Operand Windows to Exploit Bypassing in GPUs* In Proceedings of the 53rd IEEE/ACM International Symposium on Microarchitecture (**MICRO**), 2020.
- FCCM '20 Bashar Romanous, Mohammadreza Rezvani, Junjie Huang, **Daniel Wong**, Evangelos E. Papalexakis, Vassilis J. Tsotras, and Walid Najjar. *High-Performance Parallel Radix Sort on FPGA* In Proceedings of the 28th IEEE International Symposium On Field-Programmable Custom Computing Machines (**FCCM**), 2020 (Short paper/Poster).
- CAL '20 Ali Jahanshahi, Hadi Zamani Sabzi, Chester Lau, **Daniel Wong**. *GPU-NEST: Characterizing Energy Efficiency of Multi-GPU Inference Servers*. IEEE Computer Architecture Letters (**CAL**), Volume: 19, Issue: 2, July-Dec. 1 2020.
- Applied Energy '19 Wei Wang, Amirali Abdolrashidi, **Daniel Wong**, Nanpeng Yu. *Frequency Regulation Service Provision in Data Center with Computational Flexibility*. **Applied Energy**, Volume 251, October 2019. (IF 8.4)
- SMACD '19 Zeyu Sun, Taeyoung Kim, Marcus Chow, Shaoyi Peng, Han Zhou, Hyoseung Kim, **Daniel Wong**, Sheldon Tan. *Long-Term Reliability Management For Multitasking GPGPUs* In Proceedings of the 16th International Conference on Synthesis, Modeling, Analysis and Simulation Methods and Applications to Circuit Design (**SMACD**), 2019 .
- ASPLOS '19 Hodjat Asghari Esfeden, Farzad Khorasani, Hyeran Jeon, **Daniel Wong**, Nael Abu-Ghazaleh. *CORF: Coalescing Operand Register File for GPUs* In Proceedings of the 24th International Conference on Architectural Support for Programming Languages and Operating Systems (**ASPLOS**), 2019
- HPCA '19 Chih-Hsun Chou, Laxmi N. Bhuyan, **Daniel Wong**. *μ DPM: Dynamic Power Management for the Microsecond Era* In Proceedings of the 25th IEEE International Symposium on High Performance Computer Architecture (**HPCA**), 2019

- CAL '19 Hyeran Jeon, Hodjat Asghari Esfeden, Nael Abu-Ghazaleh, **Daniel Wong**. *Locality-aware GPU Register File*. IEEE Computer Architecture Letters (**CAL**), Volume: 18, Issue: 2, July-Dec. 1 2019.
- CAL '19 Kiran Ranganath, Amirali Abdolrashidi, Shuaiwen Leon Song, **Daniel Wong**. *Speeding up Collective Communications Through Inter-GPU Re-routing*. IEEE Computer Architecture Letters (**CAL**), Volume: 18, Issue: 2, July-Dec. 1 2019.
- ISLPED '18 Zhenhong Liu, **Daniel Wong**, Nam Sung Kim . *Load-Triggered Warp Approximation on GPU* In Proceedings of the International Symposium on Low Power Electronics and Design (**ISLPED**), 2018.
- IPDPS '18 Liang Zhou, Chih-Hsun Chou, Laxmi N. Bhuyan, K. K. Ramakrishnan, **Daniel Wong**. *Joint Server and Network Energy Saving in Data Centers for Latency-Sensitive Applications* In Proceedings of the 32nd IEEE International Parallel and Distributed Processing Symposium (**IPDPS**), 2018.
- MICRO '17 Amirali Abdolrashidi, Devashree Tripathy, Mehmet Belvirali, Laxmi N. Bhuyan, **Daniel Wong**. *WIRE-FRAME: Supporting Data-dependent Parallelism through Dependency Graph Execution in GPUs* In Proceedings of the 50th Annual IEEE/ACM International Symposium on Microarchitecture (**MICRO**), 2017.
- ISCA '16 **Daniel Wong**. *Peak Efficiency Aware Scheduling for Highly Energy Proportional Servers*. In Proceedings of the 43rd ACM/IEEE International Symposium on Computer Architecture (**ISCA**), 2016.
- HPCA '16 **Daniel Wong**, Nam Sung Kim, and Murali Annavaram. *Approximating Warps with Intra-warp Operand Value Similarity*. In Proceedings of the 2016 IEEE 22nd International Symposium on High Performance Computer Architecture (**HPCA**), 2016.
- ICS '16 Mohammad Abdel-Majeed, **Daniel Wong**, and Murali Annavaram. *Origami: Folding Warps for Energy Efficient GPUs*. In Proceedings of the 2016 ACM International Conference on Supercomputing (**ICS**), 2016.
- ISLPED '16 Chih-Hsun Chou, **Daniel Wong**, and Laxmi N. Bhuyan. *DynSleep: Fine-grained Power Management for a Latency-Critical Data Center Application*. In Proceedings of the International Symposium on Low Power Electronics and Design (**ISLPED**), 2016.
- DAC '16 Taeyoung Kim, Zeyu Sun, Chase Cook, Hengyang Zhao, Ruiwen Li, **Daniel Wong**, and Sheldon X.-D. Tan. *Invited - Cross-layer modeling and optimization for electromigration induced reliability*. In Proceedings of the IEEE/ACM Design Automation Conference (**DAC**), 2016.
- SBAC-PAD '16 Steena Monteiro, Forrest Iandola, and **Daniel Wong**. *STOMP: Statistical Techniques for Optimizing and Modeling Performance of Blocked Sparse Matrix Vector Multiplication*. In Proceedings of the International Symposium on Computer Architecture and High Performance Computing (**SBAC-PAD**), 2016.
- IISWC '15 **Daniel Wong**, Julia Chen, and Murali Annavaram. *A Retrospective Look Back on the Road Towards Energy Proportionality*. In Proceedings of the 2015 IEEE International Symposium on Workload Characterization (**IISWC**), 2015. (Short Paper/Poster)
- [Before 2015 \(Before joining UCR\)](#).
- HPCA '14 **Daniel Wong** and Murali Annavaram. *Implications of High Energy Proportional Servers on Cluster-wide Energy Proportionality*. In Proceedings of the 2014 IEEE 20th International Symposium on High Performance Computer Architecture (**HPCA**), 2014.
- MICRO '13 Mohammad Abdel-Majeed*, **Daniel Wong***, and Murali Annavaram. *Warped Gates: Gating Aware Scheduling and Power Gating for GPGPUs*. In Proceedings of the 46th Annual IEEE/ACM International Symposium on Microarchitecture (**MICRO**), 2013. **Co-authors contributed equally.*
- IEEE Micro Top Picks '13 **Daniel Wong** and Murali Annavaram. *Scaling the Energy Proportionality Wall with KnightShift*. **IEEE Micro**, 33(3), May 2013. Top Picks from the Computer Architecture Conferences.
- MICRO '12 **Daniel Wong** and Murali Annavaram. *KnightShift: Scaling the Energy Proportionality Wall Through Server-level Heterogeneity*. In Proceedings of the 45th Annual IEEE/ACM International Symposium on Microarchitecture (**MICRO**), 2012. **Selected as 1 of 11 IEEE Micro Top Picks.**

- WEED '12 **Daniel Wong** and Murali Annavaram. *Evaluating a Prototype KnightShift-enabled Server*. In **WEED'12: Workshop on Energy-Efficient Design**, 2012.
- MICRO '10 Jainwei Chen, Lakshmi Kumar Dabhiru, **Daniel Wong**, Murali Annavaram, and Michel Dubois. *Adaptive and Speculative Slack Simulations of CMPs on CMPs*. In Proceedings of the 43rd Annual IEEE/ACM International Symposium on Microarchitecture (**MICRO**), 2010.
- FDG '10 **Daniel Wong**, Darren Earl, Fred Zyda, Ryan Zink, Sven Koenig, Allen Pan, Selby Shlosberg, Jaspreet Singh, and Nathan Sturtevant. *Implementing Games on Pinball Machines*. In Proceedings of the Fifth International Conference on the Foundations of Digital Games (**FDG**), 2010.
- AAAI '10 **Daniel Wong**, Darren Earl, Fred Zyda, and Sven Koenig. *Teaching Robotics and Computer Science with Pinball Machines*. In **AAAI** Spring Symposium Series, 2010.

Non-referred Publications

J. Bungo, **D. Wong**, *Bringing GPU Accelerated Computing and Deep Learning to the Classroom*, Journal of Computational Science Education (**JOCSE**), Volume 12, Issue 2. Presented in Seventh SC Workshop on Best Practices for HPC Training and Education (**BPHTE**), 2020.

D. Wong, S. Lloyd, M. Gokhale, *A Memory-mapped Approach to Checkpointing*. Technical Report LLNL-TR-635611, Lawrence Livermore National Laboratory (LLNL), Livermore, CA, 2013.

I. Karlin, A. Bhatele, B. Chamberlain, J. Cohen, Z. Devito, M. Gokhale, R. Haque, R. Hornung, J. Keasler, D. Laney, E. Luke, S. Lloyd, J. McGraw, R. Neely, D. Richards, M. Schulz, C.H. Still, F. Wang, **D. Wong**, *LULESH Programming Model and Performance Ports Overview*. Technical Report LLNL-TR-608824, Lawrence Livermore National Laboratory (LLNL), Livermore, CA, 2012.

Daniel Wong and Murali Annavaram. *Scalable System-level Active Low-Power Mode with Bounded Latency*. Technical Report CENG-2012-5, Department of Electrical Engineering, University of Southern California, 2012.

Daniel Wong, Ryan Zink, and Sven Koenig. *Teaching artificial intelligence and robotics via games [poster abstract]*. In AAI Symposium on Educational Advances in Artificial Intelligence, 2010.

John O'Hollaren, Vairavan Laxman, Noah Olsman, Michael Benzimra, **Daniel Wong**, and Nielson Bernardo. *SeaBee III*. Technical report, University of Southern California Competition Robotics (USCR), University of Southern California, 2010.

Daniel Wong, Darren Earl, Fred Zyda, and Sven Koenig. *Programming Pinball Machines for Fun and Education*. Technical Report 08-901, Department of Computer Science, University of Southern California, 2008.

Invited Talks

* Note: Conference talks are omitted

Emerging communication- and power-centric architectural challenges of cloud microservices
AMD Tech Talk, August 2020 UC Merced, May 2021

Bringing GPU Accelerated Computing and Deep Learning to the Classroom
Seventh SC Workshop on Best Practices for HPC Training and Education, Nov. 2020

GPU Education @ UCR
DLI Educators Roundtable, Nvidia GTC 2020

Generating Thermally Relevant Floorplans for GPU Thermal Simulations
1st International Workshop on Cyber-Physical Systems and Intelligent Transportation Systems,
UC Irvine, 2019

Software-Hardware Co-design for Data-dependent Parallelism and Register Coalescing in GPUs
Shanghai Jiao Tong University, April 2019 Donghua University, April 2019
Shanghai Maritime University, April 2019

Energy Proportional Datacenters
University of South Carolina, Jan. 2015
Syracuse University, Feb. 2015
Temple University, Feb. 2015

University of California, Riverside, Feb. 2015
Binghamton University, Feb. 2015
University of Utah, Mar. 2015

Teaching

University of California, Riverside

- CS/EE 217 GPU Architecture and Programming, Fall '16, Fall '17, Winter '19, Fall '20, Fall '21, Fall '22
- CS/EE 147 GPU Computing and Programming, Spring '18, Spring '19, Spring '22, Spring '23
- CS 203 Advanced Computer Architectures, Winter '16, Fall '16, Winter '20, Winter '21
- CS 161 Design and Architecture of Computer Systems, Spring '16, Spring '17, Spring '18
- EE 260 Advanced GPU Microarchitectures, Winter '17

University of Southern California (Teaching Assistant)

- CS 101 Fundamentals of Computer Programming, Fall '11
- EE 357 Basic Organization of Computer Systems, Fall '11
- EE 554 Real-time Computer Systems, Spring '12

Student Advising

University of California, Riverside

- PhD Students
 - Ziyang Jia (PhD, Computer Science), Spring 2022 - Present
 - Nafis Mustakin (PhD, Computer Science), Fall 2020 - Present
 - Mohammadreza Rezvani (PhD, Computer Science), Fall 2018 - Present
 - Ali Jahanshahi (PhD, Computer Science), Fall 2017 - Present
 - Marcus Chow (PhD, Computer Science), Fall 2016 - Present
 - Dr. Kiran Ranganath (PhD, Electrical Engineering), Fall 2016 - Summer 2022 → First job: SambaNova
 - Prof. Devashree Tripathy (PhD, Computer Science, Co-advised with Laxmi Bhuyan), Fall 2015 - Summer 2021 → First job: Post-Doc at Harvard University, Currently: Assistant Professor at IIT Bhubaneswar
 - Dr. Amirali Abdolrashidi (PhD, Computer Science), Fall 2015 - Summer 2021 → First job: Google
- MS students
 - Huy Tran (MS, Computer Engineering '23)
 - Songrui He (MS, Computer Engineering '21)
 - Kaustubh Singh (MS, Computer Engineering '20) → First job: Qualcomm
 - Manjunath Shivashankarappa (MS, Computer Engineering '19) → First job: Apple
 - Haoxiang Li (MS, Computer Engineering '19) → First job: Kwest
 - Shahriyar Valielahi Roshan (MS, Computer Science '18)
 - Yukun Chen (MS, Electrical Engineering '17)
 - Ruiwen Li (MS, Computer Engineering '16) → First job: Amazon
- Undergraduate students
 - Brian Chen (CEN, SECURE) Sunny Zheng (EE, SECURE), Aun Shah (EE, SECURE), Emerson Jacobson (CS, REU, TUNE), Adrian Monges Rodriguez (CS), Kashyap Panda (CS, REU), Robert Lerias (CS, REU), Ana Cardenas Beltran (EE, REU), Mika Shanela Carodan (CS, REU), Nicole Garcia (CEN), Daisy Sanchez (CS), Vahagn Tovmasian (EE), Emily Romero (EE), Shuai Alen Wang (CS), Preston Reed (CS, TUNE), Harley Vasquez (CS, TUNE), Thomas Lee (CS), Kevin Chen (CS), Chester Lau (CEN), Marcos Miranda (CS), Zohaib Khan (EE), Ryan Meoni (CEN), Joel Borja Jr (EE), Justin Lam (EE), Morgan Lytle (EE), Dawei Huang (CS, visiting from UCLA), Todd Larson (CEN), Isaac Lino (CEN), Leon Peng (CS)

University of Southern California

Undergraduate students Julia Chen (EE, Provost Research Fellowship), Justin Kuang (EE, McNair Scholar), Yifei Zhang (Tsinghua University), Garima Aggarwal (EE)

Professional Activities

Standards Development

IEEE Standards Green ICT Standards Committee, Energy Efficient Comm. Hardware (EECH) Working Group
Co-Vice Chair, 2021 - Present, Member, 2020-Present
Contributor to IEEE Standard 1923.1-2021 and IEEE Recommended Practices P1924.1

Editorial Board

Integration Integration, the VLSI Journal, Associate Editor, 2017 - Present

Organization Committee Member

ISCA International Symposium on Computer Architecture, Tutorials Chair, 2018
GPGPU Workshop on General Purpose Processing Using GPU, Co-chair, 2022, 2023
HPCA International Symposium on High Performance Computer Architecture, Travel Grant Chair, 2023
ASPLOS International Conference on Architectural Support for Programming Languages and Operating Systems, Travel Grant Co-Chair, 2024

Program Committee Member

SC International Conference for High Performance Computing, Networking, Storage, and Analysis, 2022
HPCA International Symposium on High Performance Computer Architecture, 2021, 2022, 2023
MICRO International Symposium on Microarchitecture, 2016, 2022
IPDPS International Parallel and Distributed Processing Symposium, 2018 - 2021
DATE Design, Automation and Test in Europe, 2019 - 2022
ISLPED International Symposium on Low Power Electronics and Design, 2016 - 2023
ICCD International Conference on Computer Design, 2016, 2017, 2020, 2021, 2022
APPT Advanced Parallel Programming Technologies, 2021
HPG High-Performance Graphics, 2020
NAS International Conference on Networking, Architecture, and Storage, 2016, 2020, 2021
ICPP International Conference on Parallel Processing, 2018, 2019
DUAC International Workshop on Deployment and Use of Accelerators, 2021
GPGPU Workshop on General Purpose Processing Using GPU, 2019, 2020
YArch The Young Architect Workshop, 2019 - 2021
HPCaML International Workshop on the Intersection of High Performance Computing & Machine Learning, 2019
ASPLOS SRC ASPLOS ACM Student Research Competition, 2018, 2019 (judge)

External Review Committee

ISCA International Symposium on Computer Architecture, 2022
MICRO International Symposium on Microarchitecture, 2019, 2021
HPCA International Symposium on High Performance Computer Architecture, 2018, 2019

External Reviewer

OOPSLA Conference on Object-Oriented Programming Systems, Languages, and Applications (OOPSLA), 2021
SIGMETRICS ACM SIGMETRICS, 2021

Invited Reviewer

TODAES ACM Transactions on Design Automation of Electronic Systems, 2018

TOMPECS ACM Transactions on Modeling and Performance Evaluation of Computing Systems, 2018, 2019, 2020
TACO ACM Transactions on Architecture and Code Optimization, 2018 - 2021
TOPC ACM Transactions on Parallel Computing, 2018
TSC IEEE Transactions on Services Computing, 2017, 2020
TCC IEEE Transactions on Cloud Computing, 2017
TC IEEE Transactions on Computers, 2016, 2018-2020
CAL IEEE Computer Architecture Letters, 2015 - 2016, 2018, 2021
TPDS IEEE Transactions on Parallel and Distributed Systems, 2015, 2017, 2019
IEEE Micro IEEE Micro, 2018
D&T IEEE Design & Test, 2015

[Session Char](#)

HPCA International Symposium on High Performance Computer Architecture, 2022, 2023
NAS International Conference on Networking, Architecture, and Storage, 2021
ICS International Conference on Supercomputing, 2016
ISLPED International Symposium on Low Power Electronics and Design, 2016, 2020

[Panelist](#)

DOE Department of Energy Proposal Review Panelist, 2021
NSF National Science Foundation Proposal Review Panelist, 2018, 2019

[Professional Membership](#)

IEEE Institute of Electrical and Electronics Engineers
ACM Association for Computing Machinery

[Personal](#)

US Citizen