Weiwen Jiang

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Research Interests and Specialties

- **Quantum Machine Learning:** we are the first to demonstrate the potential quantum advantage in executing neural networks via a Co-Design approach [1][4][5][25].
- **Co-Design of Neural Architecture and Hardware Accelerators:** we are the first to propose co-design frameworks to explore neural architectures and FPGAs, ASICs, and CiM platforms [2][3][24][6] [9][10][11][12][26][27][28][29][30][31][32][33].
- **General Embedded System Design and Optimization:** especially for (1) heterogeneous pipelined MPSoCs [8][14][34][35][40]; (2) asynchronous embedded systems [13][16][17][18][36][37][38][39]; (3) NoC-based MPSoCs [19][20][21][43]; (4) emerging devices: [7][10][15][22][23][44].

Employment

University of Notre Dame (PI: Dr. Yiyu Shi)　　　　　　　JUNE 2019 – NOW. NOTRE DAME, U.S.
- **Postdoctoral Researcher in the Department of Computer Science and Engineering**. Focus on the co-exploration of neural architectures and hardware design, including qauntum computer.

University of Notre Dame　　　　　　　　　　JAN. 2020 – MAY 2020 NOTRE DAME, U.S.
- **Teaching Assisitant**. CSE20221, Logical Design and Sequential Circuit.

East China Normal University　　　　　　　APR. 2019 – APR. 2020 SHANGHAI, CHINA
- **Guest Research Fellows** in Big Data and Intelligent System Lab.

Education

University of Pittsburgh (PI: Dr. Jingtong Hu)　　OCT. 2017 – JUNE 2019 PITTSBURGH, U.S.
- **Joint Ph.D. program in the Department of Electrical and Computer Engineering**. Focus on the co-exploration of neural architecture and hardware design.

Chongqing University (Advisor: Dr. Edwin Sha)　　SEPT. 2013 – JUNE 2019 CHONGQING, CHINA
- **Ph.D. degree in Computer Science**. Focus on the embedded system design and optimizations: designing high-performance and low-cost heterogeneous pipelining systems.

Nanjing Agriculture University　　　　　　　SEPT. 2008 – JUNE 2012. JIANGSU, CHINA
- **Bachelor degree in Computer Science**. Major in Network Engineering.

Awards

Hackathon Top Winning Award at IEEE SERVICES 2020 (2 out of 10 teams)　　　　12/2020

Best Paper Nomination at ASP-DAC 2020 (12 out of 263 submissions)　　　　01/2020. BEIJING

Best Paper Nomination at CODES+ISSS 2019 (3 out of 74 submissions)　　10/2019. NEW YORK

Best Paper Nomination at DAC 2019 (5 out of 815 submissions)	06/2019. LAS VEGAS
Best Paper Award at ICCD 2017 (5 out of 258 submissions)	11/2017. BOSTON
Best Student Paper at ESTC 2017	11/2017. CHINA
Best Paper Nomination at ASP-DAC 2016	01/2016. MACAO
Best Paper Award at NVMSA 2015	08/2015. HONGKONG
Editor's pick of the year 2016 in IEEE TC	12/2016. USA
China National Scholarship (1% among all postgraduate students)	11/2017. CHINA

Research & Other Grants

- **Co-PI, NSF-IIS**, "RAPID: Collaborative Research: Independent Component Analysis Inspired Statistical Neural Networks for 3D CT Scan Based Edge Screening of COVID-19", 07/01/2020 - 06/30/2021, $98,349 (PI: Prof. Yiyu Shi)

- **Co-PI, Facebook Research Funding** - Towards On-Device AI, "Hardware/Software Co-Exploration of Multi-Modal Neural Architectures Targeting AR/VR Glasses", 04/01/20 - 04/01/21, $75,000 (PI: Prof. Yiyu Shi)

- **PI, NSF-I/UCRC**, "Software Defined FPGA Hardware and Co-Exploration for Real-Time Applications", from EdgeCortix Inc. via NSF IUCRC ASIC center, 10/01/19 - 09/30/20, $100,000 (Co-PI: Prof. Yiran Chen)

- **Sole-PI, NSF-I/UCRC**, "Co-Exploration of Transformer and Resource-Constrained Hardware Accelerator for TinyML Applications", from EdgeCortix Inc. via NSF IUCRC ASIC center, 06/01/21 - 06/01/22, $100,000 (Pending)

- **PI, IBM-ND**, "Co-Design Neural Netwok and Quantum Circuit Towards Quantum Advantage", IBM & University of Notre Dame Quantum program, 11/01/19 - now, accessing to IBM Q system

- Research Opportunities Week (ROW) at the Technical University of Munich (TUM), 04/20/2020-04/27/2020 (Cancelled due to COVID-19)

- IEEE Council on Electronic Design Automation (CEDA) for ESWEEK'19, $1,000

- Grants from ACM SIGDA to participate the HALO workshop in ICCAD'19

- Travel grants from ACM to attend FPGA'19

- Scholarship from SIGDA and IEEE CEDA to attend PhD Forum at DAC'18

- Scholarship from SIGDA and Microsoft to participate Student Research Competition at ICCAD'17

Proposal Writing

NSF CCF-SPX (2019): Collaborative Research: Scalable Neural Network Paradigms to Address Variability in Emerging Device based Platforms for Large Scale Neuromorphic Computing (Awarded $344,132, PI: Yiyu Shi, No. 1919167)

NSF CNS Core: Small (2020): Intermittent and Incremental Inference with Statistical Neural Network for Energy-Harvesting Powered Devices (Awarded $480,272, PI: Yiyu Shi, No. 2007302 and PI: Jingtong Hu, No. 2007274)

NSFC (2019): On the Design and Optimization of Efficient Intelligent Heterogeneous Computing Pipelining Systems (Awarded $100,000, PI: Edwin Sha, No. 61972154)

Teaching Experience

High-Performance Parallel Computing (TA for Dr. Edwin Sha)	2014 – 2015. CHONGQING UNIV.
INVESTING NOW summer program (Volunteer)	JULY 2018. UNIV. OF PITTSBURGH.

Striving for Excellence in Teaching (Work-in-progress for certification)	UNIV. OF NOTRE DAME.
Logic Design and Sequential Circuits (TA, CSE20221)	2020. UNIV. OF NOTRE DAME
Machine Learning for Embedded Systems (TA, CSE60685)	2020. UNIV. OF NOTRE DAME
IBM Qiskit Training Course for Quantum Computing (Lecturer for QML)	2021. UNIV. OF NOTRE DAME

Mentor of Students

- Hailiang Dong (Master at Chongqing University) [8][15][35][40][41], First Employment: Ph.D Candidate at the University of Texas at Dallas
- Xinchi Li (Master at Chongqing University) [41], First Employment: Tencent in Chengdu
- Yutong Liang (Master at Chongqing University) [42], First Employment: PingCAP Inc. in Beijing
- Zhulin Ma (Ph.D. candidate at Chongqing University) [15]
- Hanjing Zhu, Jun. 2020-Sept. 2020. (Undergraduate student at the University of Notre Dame)
- Alicia Hu, Feb. 2018- May 2018. (Undergraduate student at the University of Pittsburgh)
- Xinyi Zhang, 2017-Dec. 2020. (Ph.D. candidate at the University of Pittsburgh) [2][3][32]
- Matthew Coffey, Nov. 2020-Jan. 2021. (CS Senior at the University of Notre Dame, Quantum ML)
- Qing Lu, 2018-Now. (Ph.D. candidate at the University of Notre Dame) [30][33]
- Zheyu Yan, 2019-Now. (Ph.D. candidate at the University of Notre Dame) [10][29]
- Yuhong Song, 2020-Now. (Master student at East China Normal University) [24]
- Panjie Qi, 2020-Now. (Master student at East China Normal University)
- Shan Hao, 2020-Now. (Master student at East China Normal University)
- Dewen Zeng, 2020-Now. (Ph.D. candidate at the University of Notre Dame) [26]
- Zhuorui Zhao, 2020-Now. (Ph.D. candidate at the University of Notre Dame)
- Colin McDonald, 2020-Now. (CS Junior at the University of Notre Dame, Quantum ML)

Publications

Three Representative Papers

[1] **W. Jiang**, J. Xiong, and Y. Shi, "A Co-Design Framework of Neural Networks and Quantum Circuits Towards Quantum Advantage", **Nature Communications**, 12(1): 1-13, 2021.

[2] **W. Jiang**, X. Zhang, E. H.-M. Sha, L. Yang, Q. Zhuge, Y. Shi, and J. Hu, "Accuracy vs. Efficiency: Achieving Both through FPGA-Implementation Aware Neural Architecture Search," *Proc. Design Automation Conference (DAC)*, Las Vegas, NV, USA, June. 2019. (5 out of 815 submissions, **BEST PAPER NOMINATION**)

[3] **W. Jiang**, E. H.-M. Sha, X. Zhang, L. Yang, Q. Zhuge, Y. Shi and J. Hu, "Achieving Super-Linear Speedup across Multi-FPGA for Real-Time DNN Inference", International Conference on Hardware/Software Co-design and System Synthesis (CODE+ISSS@New York), also appears at ACM Transactions on Embedded Computing Systems (TECS), 2019. (3 out of 74 submissions, **BEST PAPER NOMINATION**)

Selected Under Review and Work-in-Progress Papers

[4] **W. Jiang**, J. Cong, J. Xiong, and Y. Shi, "Can Quantum Computers Attain Advantage on Deep Learning?", invited to submit a perspective article to **Nature**.

[5] **W. Jiang**, Y. Ding, and Y. Shi, "Universal Approximability of Deep Learning in Hybrid Quantum-Classical Computing", submitted to **npj Quantum Information**.

Journal Papers

[6] Y. Ding, **W. Jiang**, Q. Lou, J. Liu, J. Xiong, X. Sharon Hu, X. Xu, and Y. Shi, "The Impact of Neural Networks' Competency-Awareness on Hardware Design", accepted by **Nature Electronics**, Aug. 2020

[7] **W. Jiang**, B. Xie, C-C Liu and Y. Shi, "Integrating Memristors and CMOS for Better AI", accepted by **Nature Electronics**, Sept. 2019

[8] **W. Jiang**, E. H.-M. Sha, Q. Zhuge, L. Yang, H. Dong and X. Chen, "On the Design of Minimal-Cost Pipeline Systems Satisfying Hard/Soft Real-Time Constraints," *IEEE International Conference on Computer Design* (*ICCD@Boston*) and *in IEEE Transactions on Emerging Topics in Computing* (*TETC*), Jan. 2018. (5 out of 258 submissions, **BEST PAPER AWARD**)

[9] **W. Jiang**, L. Yang, S. Dasgupta, J. Hu, and Y. Shi, "Standing on the Shoulders of Giants: Hardware and Neural Architecture Co-Search with Hot Start", Accepted by International Conference on Hardware/Software Co-design and System Synthesis (CODE+ISSS), also appears at IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (**TCAD**), 2020. *(acceptance rate 94/375=25.1%)*

[10] **W. Jiang**, Q. Lou, Z. Yan, L. Yang, J. Hu, X. Hu, and Y. Shi, "Device-Circuit-Architecture Co-Exploration for Computing-in-Memory Neural Accelerators", *IEEE Transactions on Computers* (*TC*), *Apr. 2020.*

[11] **W. Jiang**, L. Yang, E. H.-M Sha, Q. Zhuge, S. Gu, S. Dasgupta, Y. Shi and J. Hu, "Hardware/Software Co-Exploration of Neural Architectures", *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems* (*TCAD*), *Mar. 2020.*

[12] **W. Jiang**, E. H.-M. Sha, Q. Zhuge, L. Yang, X. Chen and J. Hu, "Heterogeneous FPGA-based Cost-Optimal Design for Timing-Constrained CNNs", *accepted by CASES 2018* (*in ESWEEK*) and *appear in IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems* (*TCAD*). *(acceptance rate 67/270=24.8%)*

[13] **W. Jiang**, E. H.-M. Sha, Q. Zhuge, L. Yang, X. Chen and J. Hu, "On the Design of Time-Constrained and Buffer-Optimal Self-Timed Pipelines", *in IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems* (*TCAD*), May 2018.

[14] **W. Jiang**, E. H.-M. Sha, X. Chen, L. Yang, L. Zhou and Q. Zhuge, "Optimal Functional-Unit Assignment for Heterogeneous Systems under Timing Constraint," *in IEEE Transactions on Parallel and Distributed Systems* (*TPDS*), 28(9): 2567-2580, 2017.

[15] E. H.-M. Sha, **W. Jiang**, H. Dong, Z. Ma, R. Zhang, X. Chen and Q. Zhuge, "Towards the Design of Efficient and Consistent Index Structure with Minimal Write Activities for Non-Volatile Memory", *in IEEE Transactions on Computers* (*TC*), 67(3): 432-448, 2018.

[16] **W. Jiang**, E. H.-M. Sha, Q. Zhuge and Lin Wu, "Efficient Assignment Algorithms to Minimize Operation Cost for Supply Chain Networks in Agile Manufacturing," *in Computers & Industrial Engineering*, 108: 225-239, 2017.

[17] **W. Jiang**, E. H.-M. Sha, X. Chen, L. Wu and Q. Zhuge, "Synthesizing Distributed Pipelining Systems with Timing Constraints via Optimal Functional Unit Assignment and Communication Selection," *in Journal of Computational Science*, 26: 332-343, 2018.

[18] **W. Jiang**, Q. Zhuge, X. Chen, L. Yang, J. Yi and E. H.-M. Sha, "Properties of Self-Timed Ring Architectures for Deadlock-Free and Consistent Configuration Reaching Maximum Throughput," *in Journal of Signal Processing Systems*, 84(1): 123-137, 2016.

[19] W. Liu, L. Yang, **W. Jiang**, L. Feng, N. Guan, W. Zhang and N. Dutt, "Thermal-aware Task Mapping on Dynamically Reconfigurable Network-on-Chip based Multiprocessor System-on-Chip", *in IEEE Transactions on Computers* (*TC*), 2018.

[20] L. Yang, W. Liu, **W. Jiang**, M. Li, P. Chen and E. H.-M. Sha, "FoToNoC: A Folded Torus-Like Network-on-Chip based Many-Core Systems-on-Chip in the Dark Silicon Era," *in IEEE Transactions on Parallel and Distributed Systems*, Dec. 2016. DOI:10.1109/TPDS.2016.2643669.

[21] L. Yang, W. Liu, **W. Jiang**, M. Li, J. Yi and E. H. M. Sha, "Application Mapping and Scheduling for Network-on-Chip-Based Multiprocessor System-on-Chip With Fine-Grain Communication Optimization" *IEEE Transactions on Very Large Scale Integration Systems*, 24(10): 3027-3040, Oct. 2016.

[22] E. H.-M. Sha, X. Chen, Q. Zhuge, L. Shi and **W. Jiang**, "A New Design of In-Memory File System Based on File Virtual Address Framework," *in IEEE Transactions on Computers*, 65(10):2959-2972, Oct. 2016.

[23] X. Chen, E. H.-M. Sha, Q. Zhuge, C. J. Xue, **W. Jiang** and Y. Wang, "Efficient data placement for improving data access performance on domain-wall memory" *IEEE Transactions on Very Large Scale Integration (VLSI) Systems*, 24(10): 3094-3104, 2016.

Conference Papers

[24] Y. Song, **W. Jiang**, B. Li, Q. Zhuge, E. H.-M. Sha, S. Dasgupta, Y. Shi, C. Ding, "Dancing along Battery: Enabling Transformer with Run-time Reconfigurability", *accepted by **DAC-21***.

[25] **W. Jiang**, J. Xiong and Y. Shi, "When Machine Learning Meets Quantum Computers: A Case Study," *Proc. of IEEE/ACM Asia and South Pacific Design Automation Conference (**ASP-DAC**))*, 2021 (Invited Paper)

[26] D. Zeng, **W. Jiang**, T. Wang, X. Xu, H. Yuan, M. Huang, J. Zhuang, J. Hu and Y. Shi, "Towards Cardiac Intervention Assistance: Hardware-Aware Neural Architecture Exploration for Real-Time 3D Cardiac Cine MRI Segmentation," *Proc. of IEEE/ACM International Conference on Computer-Aided Design (**ICCAD**)*, 2020 (Invited Paper)

[27] S. Bian, X. Xu, **W. Jiang**, Y. Shi and T. Sato, "BUNET: Blind Medical Image Segmentation Based on Secure UNET", *Proc. Medical Image Computing and Computer Assisted Interventions (**MICCAI**)*, Lima, Peru, 2020
(acceptance rate 30%)

[28] X. Yan, **W. Jiang**, Y. Shi and C. Zhuo, "MS-NAS: Multi-Scale Neural Architecture Search for Medical Image Segmentation", *Proc. Medical Image Computing and Computer Assisted Interventions (**MICCAI**)*, Lima, Peru, 2020
(acceptance rate 30%)

[29] L. Yang, Z. Yan, M. Li, H. Kwon, L. Lai, T. Krishna, V. Chandra, **W. Jiang**, Y. Shi, "Co-Exploration of Neural Architectures and Heterogeneous ASIC Accelerator Designs Targeting Multiple Tasks", *Proc. Design Automation Conference (**DAC**)*, San Francisco, July 19-23.
(acceptance rate 228/992=23.0%)

[30] S. Bian, **W. Jiang**, Q. Lu, Y. Shi, and T. Sato, "NASS: Optimizing Secure Inference via Neural Architecture Search", *24th European Conference on Artificial Intelligence (**ECAI'20**)*
(acceptance rate 365/1363=26.8%)

[31] L. Yang, **W. Jiang**, W. Liu, E. H.-M. Sha, Y. Shi and J. Hu, "Co-Exploring Neural Architecture and Network-on-Chip Design for Real-Time Artificial Intelligence," *Proc. Asia and South Pacific Design Automation Conference (**ASP-DAC**)*, Beijing, Jan. 2020. (12 out of 263 submissions, **BEST PAPER NOMINATION**)

[32] X. Zhang, **W. Jiang**, Y. Shi and J. Hu, "When Neural Architecture Search Meets Hardware Implementation: from Hardware Awareness to Co-Design," *Proc. IEEE Computer Society Annual Symposium on VLSI (**ISVLSI**)*, Miami, Florida, USA, Aug. 2019. (Invited Paper)

[33] Q. Lu, **W. Jiang**, X. Xiao, J. Hu and Y. Shi, "On Neural Architecture Search for Resource-Constrained Hardware Platforms," *Proc. IEEE/ACM International Conference On Computer-Aided Design (**ICCAD**)*, Westminster, CO, 2019. (Invited paper)

[34] **W. Jiang**, E. H.-M. Sha, Q. Zhuge and X. Chen, "Optimal Functional-Unit Assignment and Buffer Placement for Probabilistic Pipelines," *Proc. International Conference on Hardware/Software Co-design and System Synthesis (**CODES+ISSS**)*, Pittsburgh, PA, USA, Oct. 2016. *(acceptance rate 21/80=26.3%)*

[35] **W. Jiang**, E. H.-M. Sha, Q. Zhuge, H. Dong and X. Chen, "Optimal Functional Unit Assignment and Voltage Selection for Pipelined MPSoC with Guaranteed Probability on Time Performance," *Proc. Languages, Compilers, and Tools for Embedded Systems (**LCTES**)*, Barcelona, Spain, June 2017. *(acceptance rate 13/51=25.5%)*

[36] E. H.-M. Sha, **W. Jiang**, Q. Zhuge, L. Yang and X. Chen, "On the Design of High-Performance and Energy-Efficient Probabilistic Self-Timed Systems," *Proc. High Performance Computing and Communications (**HPCC**)*, NewYork, NY, USA, Aug. 2015.

[37] E. H.-M. Sha, **W. Jiang**, Q. Zhuge, X. Chen and L. Yang, "Prevent Deadlock and Remove Blocking for Self-Timed Systems," *Proc. International Conference on Algorithms and Architectures for Parallel Processing (**ICA3PP**)*, Zhangjiajie, China, Nov. 2015.

[38] **W. Jiang**, E. H.-M. Sha, X. Chen, Q. Zhuge and L. Wu, "Optimal Functional Assignment and Communication Selection under Timing Constraint for Self-Timed Pipelines," *Proc. IEEE International Conference on Embedded Software and Systems (**ICESS**)*, Chengdu, China, Aug. 2016.

[39] **W. Jiang**, Q. Zhuge, J. Yi, L. Yang and E. H.-M. Sha, "On self-timed ring for consistent mapping and maximum throughput," *Proc. Embedded and Real-Time Computing Systems and Applications (**RTCSA**)*, Chongqing, China, Aug. 2014.

[40] E. H.-M. Sha, H. Dong, **W. Jiang**, Q. Zhuge, X. Chen and L. Yang, "On the Design of Reliable Heterogeneous Systems via Checkpoint Placement and Core Assignment," *Proc. Great Lakes Symposium on VLSI (**GLSVLSI**)*, Chicago, IL, USA, May 2018.

[41] X. Li, Q. Zhuge, **W. Jiang**, H. Dong, W. Lin, X. Chen and E. H.-M. Sha, "A Research of Reducing Write Activities in Multi-table Join for Non-Volatile Memories," *Proc. 15th CCF Annual Conference on Embedded Systems (**ESTC**)*, Shenyang, China, Nov. 2017. (**BEST STUDENT PAPER AWARD**)

[42] E. H.-M. Sha, Y. Liang, **W. Jiang**, X. Chen and Q. Zhuge, "Optimizing Data Placement of MapReduce on Ceph-Based Framework under Load-Balancing Constraint," *Proc. International Conference on Parallel and Distributed Systems (**ICPADS**)*, Wuhan, China, Dec. 2016.

[43] L. Yang, W. Liu, **W. Jiang**, M. Li, J. Yi and E. H.-M. Sha, "FoToNoC: A hierarchical management strategy based on folded lorus-like Network-on-Chip for dark silicon many-core systems," *Proc. 2016 21st Asia and South Pacific Design Automation Conference (**ASP-DAC**)*, Macao, Jan. 2016. (**BEST PAPER NOMINATION**)

[44] E. H.-M. Sha, X. Chen, Q. Zhuge, L. Shi and **W. Jiang**, "Designing an Efficient Persistent In-Memory File System," *Proc. the 4th IEEE Non-Volatile Memory System and Applications Symposium (**NVMSA**)*, Hongkong, Aug. 2015. (**BEST PAPER AWARD**)

Invited Talks (not include job talk)

- University of Delaware (host: Prof. Chenmo Yang), May. 12, 2021
- tinyML talks webcast, Dec. 8, 2020
- Southeastern University (host: Prof. Qi Zhu), Dec. 2020
- Rice University (host: Prof. Yingyan Lin), Nov. 2020
- University of New Mexico (host: Prof. Lei Yang), Nov. 2020
- tinyML Asia talk, Nov. 19, 2020
- Zhejiang University (host: Prof. Chen Zhuo), Oct. 2020
- University of Science and Technology of China (host: Prof. Yu-Chun Wu), Oct. 2020

- IBM Quantum Summit, Sept. 2020
- Workshop on Research Open Automatic Design for Neural Networks (ROAD4NN), July, 2020
- Workshop on Hardware and Algorithms for Learning On-a-chip (HALO), Nov. 2019
- Northeastern University (host: Prof. Yanzhi Wang), Oct. 2019
- Technical Webinar of NSF IUCRC for ASIC, Aug. 2019

Professional Services

Journal Reviewer

- IEEE Transactions on Computers (TC)
- IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)
- IEEE Transactions on Very Large Scale Integration (TVLSI)
- IEEE Transactions on Emerging Topics in Computing (TETC)
- IEEE Transactions on Neural Networks and Learning Systems (TNNLS)
- IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)
- IEEE Embedded System Letter (ELS)
- IEEE Access
- ACM Transactions on Embedded Computing Systems (TECS)
- ACM Transactions on Design Automation of Electronic Systems (TODAES)
- ACM Journal on Emerging Technologies in Computing (JETC)
- Journal of Parallel and Distributed Computing (JPDC)
- Journal of Computer Science and Technology (JCST)
- Communications in Statistics - Simulation and Computation
- Microprocessors and Microsystems (MICPRO)
- SPRINGER Journal of Signal Processing Systems (JSPS)
- HINDAWI Complexity (Complexity)
- Mathematics

Conference Technical Program Committee:

- International Conference On Computer Aided Design (ICCAD 2021)
- Design Automation Conference (DAC 2021)
- Asia and South Pacific Design Automation Conference (ASP-DAC 2021)
- IEEE Computer Society Annual Symposium on VLSI (ISLVLSI 2020)
- ACM Great Lakes Symposium on VLSI (GLSVLSI 2020,2021)
- ACM/SIGAPP Symposium On Applied Computing (SAC 2020,2021)
- IEEE International System-on-Chip Conference (IEEE SOCC 2020)
- Late Break Results in Design Automation Conference (LBR-DAC 2020)
- Student Research Forum at Asia and South Pacific Design Automation Conference (ASP-DAC 2020,2021)
- IEEE Real-Time Systems Symposium (RTSS 2019, Artifact Evaluation Committee)