

# Tsung-Wei Huang's CV

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## POSITIONS

**Assistant Professor** – ECE Department, University of Utah 2019-present  
**Research Assistant Professor** – ECE Department, University of Illinois at Urbana-Champaign 2018-2019

## EDUCATION




**PhD** – ECE Department, University of Illinois at Urbana-Champaign, IL, USA 2013-2017  
**BS/MS** – CS Department, National Cheng Kung University, Tainan, Taiwan 2006-2011

## RESEARCH INTERESTS

Parallel and Heterogeneous Computing Systems, Computer-aided Design, Machine Learning Systems

## SOFTWARE

My software releases have accumulated more than 1M downloads and 5K stars in GitHub repositories.

Software	GitHub
 Taskflow: A General-purpose Parallel and Heterogeneous Task Programming System	<a href="https://github.com/taskflow/taskflow">https://github.com/taskflow/taskflow</a> - Champion of 2020 IEEE HPEC Neural Network Challenge - 2 <sup>nd</sup> Place of Open Source Software Award in ACM MM19 - Best Poster Award in 2018 C++ Conference (CppCon)
 OpenTimer: A High-performance Timing Analysis Tool for VLSI Systems	<a href="https://github.com/OpenTimer/OpenTimer">https://github.com/OpenTimer/OpenTimer</a> - Best EDA Software Tool in 2018 WOSET@ICCAD - ACM TAU Top-3 Winners in 2014-2016 - Golden Timers of ACM TAU Contests in 2014-2016
 DtCraft: A General-purpose Distributed Programming System using Data-parallel Streams	<a href="https://github.com/twhuang-uiuc/DtCraft">https://github.com/twhuang-uiuc/DtCraft</a> - Best Open-source Software Award in ACM MM18

## SELECTED AWARDS

- Best Paper Award for “GPU-Accelerated Path-based Timing Analysis”, ACM TAU Workshop, 2021
- Champion of the IEEE/MIT/Amazon HPEC Large Sparse Neural Network Challenge, 2020
- 2<sup>nd</sup> Place (Taskflow), Open-source Software Competition, ACM Multimedia Conference, 2019
- ACM SIGDA Outstanding PhD Dissertation Award (thesis title: “Distributed Timing Analysis”), 2019
- Best Tool Award (OpenTimer), Workshop on Open-source EDA Technology, 2018
- Best Open-source Software Award (DtCraft), ACM Multimedia Conference, 2018
- Best Poster Award for Open-source Parallel Programming Library (Taskflow), CPP Conference, 2018
- 2<sup>nd</sup> and 1<sup>st</sup> Place, ACM/SIGDA CADathlon International Programming Contest, 2014 and 2017
- 1<sup>st</sup>, 2<sup>nd</sup>, and 1<sup>st</sup> Place, ACM TAU Timing Analysis Contest, 2014 through 2016
- Yi-Min Wang and Pi-Yu Chung Endowed Research Award, ECE Dept. UIUC, 2016
- Rambus Computer Engineering Fellowship, ECE Dept. UIUC, 2015-2016
- Study Abroad Scholarship for Outstanding EECS Students, Ministry of Education, Taiwan, 2013-2014
- 2<sup>nd</sup> Place, ACM Student Research Competition Grand Final, ACM Annual Award Banquet, 2011
- Best Master's Thesis Award, Taiwan Institute of Electrical and Electronic Engineering, 2011

- Best Master's Thesis Award, IEEE Taiwan Tainan Section, 2011
- Best Master's Thesis Award, Taiwan Institute of Information and Computing Machinery, 2011
- 1<sup>st</sup> Place, Master's Thesis Contest, Chinese Institute of Electrical Engineering, Taiwan, 2011
- Outstanding Graduate Recruiting Fellowship, National Cheng Kung University, 2010
- Outstanding Student Scholarship, Garmin Corporation, Taiwan, 2010
- 1<sup>st</sup> Place, ACM/SIGDA Student Research Competition, Design Automation Conference, 2010
- 3<sup>rd</sup> Place, National Collegiate Cell-Based IC Design Contest, Ministry of Education, Taiwan, 2010
- Distinguished Engineering Student Fellowship, Chinese Institute of Engineers, Taiwan, 2009
- 1<sup>st</sup> Place, National Collegiate Nano Device CAD Contest, Nano Device Laboratories, Taiwan, 2009
- 3<sup>rd</sup> Place, National Collegiate Programming Contest, Ministry of Education, Taiwan, 2009
- 2<sup>nd</sup> Place, National Collegiate IC/CAD Programming Contest, Ministry of Education, Taiwan, 2009
- 2<sup>nd</sup> Place, Presidential Award in CS Department, National Cheng Kung University, Taiwan, 2009

## **RESEARCH GRANT**

1. PI, "A General-purpose Parallel and Heterogeneous Task Graph Computing System for VLSI CAD," \$403K, 10/2021—10/2024, NSF CCF-2126672
2. PI, "GPU Algorithms with Taskflow," \$5000, 07/2021-12/2021, NumFOCUS Small Development Grant r2
3. PI, "Taskflow-San: Sanitizing Erroneous Control Flows in Taskflow," \$5000, 05/2021—12/2021, NumFOCUS Small Development Grant r1
4. PI, "OpenTimer and DtCraft," \$427K, 06/2018—07/2019, DARPA FA 8650-18-2-7843

## **CONFERENCE**

1. Cheng-Hsiang Chiu, Dian-Lun Lin and Tsung-Wei Huang, "An Experimental Study of SYCL Task Graph Parallelism for Large-Scale Machine Learning Workloads," *International Workshop of Asynchronous Many-Task systems for Exascale (AMTE), in conjunction with Euro-Par*, 2021
2. Dian-Lun Lin and Tsung-Wei Huang, "Efficient GPU Computation using Task Graph Parallelism," *European Conference on Parallel and Distributed Computing (Euro-Par)*, 2021
3. Guannan Guo, Tsung-Wei Huang, and Martin Wong, "GPU-accelerated Path-based Timing Analysis," *ACM/IEEE Design Automation Conference*, 2021
4. Zizheng Guo, Tsung-Wei Huang, and Yibo Lin, "A Provably Good and Practically Efficient Common Path Pessimism Removal Algorithm for Large Designs," *ACM/IEEE Design Automation Conference*, 2021
5. Kuan-Ming Lai, Tsung-Wei Huang, Pei-Yu Lee, and Tsung-Yi Ho, "ATM: A High Accuracy Extracted Timing Model for Hierarchical Timing Analysis," *IEEE/ACM Asia and South Pacific Design Automation Conference (ASPDAC)*, Tokyo, Japan, 2021
6. Chun-Xun Lin, Tsung-Wei Huang, and Martin D. F. Wong, "An Efficient Work-Stealing Scheduler for Task Dependency Graph," *IEEE International Conference on Parallel and Distributed Systems (ICPADS)*, Hong Kong, 2020
7. D.-L. Lin and Tsung-Wei Huang, "A Novel Inference Algorithm for Large Sparse Neural Network using Task Graph Parallelism," *IEEE High-performance Extreme Computing (HPEC)*, Waltham, MA, 2020
8. Z. Guo, Tsung-Wei Huang, and Yibo Lin, "GPU-Accelerated Static Timing Analysis," *IEEE/ACM International Conference on Computer-aided Design (ICCAD)*, San Diego, 2020
9. G. Guo, Tsung-Wei Huang, Chun-Xun Lin, and Martin D. F. Wong, "An Efficient Critical Path Generation Algorithm Considering Extensive Path Constraints," *IEEE/ACM Design Automation Conference (DAC)*, San Francisco, CA, 2020
10. Chun-Xun Lin, Tsung-Wei Huang, Guannan Guo, and Martin D. F. Wong, "A Modern C++ Parallel Task Programming Library," *ACM Multimedia Conference (MM)*, Nice, France, 2019
11. Chun-Xun Lin, Tsung-Wei Huang, Guannan Guo, and Martin D. F. Wong, "An Efficient and Composable Parallel Programming Library," *IEEE High-performance Extreme Computing (HPEC)*, Waltham, MA, 2019

12. Tsung-Wei Huang, Chun-Xun Lin, Guannan Guo, and Martin D. F. Wong, "Cpp-Taskflow: Fast Task-based Parallel Programming using Modern C++," *IEEE International Parallel and Distributed Processing Symposium (IPDPS)*, Rio De Janeiro, Brazil, 2019
13. Kuan-Ming Lai, Tsung-Wei Huang, and Tsung-Yi Ho, "A General Cache Framework for Efficient Generation of Timing Critical Paths," *ACM/IEEE Design Automation Conference (DAC)*, Las Vegas, NV, 2019
14. Tsung-Wei Huang, Chun-Xun Lin, Guannan Guo, and Martin D. F. Wong, "Essential Building Blocks for Creating an Open-source EDA Project," *ACM/IEEE Design Automation Conference (DAC)*, Las Vegas, NV, 2019
15. Tsung-Wei Huang, Chun-Xun Lin, and Martin D. F. Wong, "Distributed Timing Analysis at Scale," *ACM/IEEE Design Automation Conference (DAC)*, Las Vegas, NV, 2019
16. Tsung-Wei Huang, Chun-Xun Lin, Guannan Guo, and Martin D. F. Wong, "A General-purpose Distributed Programming Systems using Data-parallel Streams," *ACM Multimedia Conference (MM)*, Seoul, Korea, 2018
17. Chun-Xun Lin, Tsung-Wei Huang, G. Guo, and Martin D. F. Wong, "MtDetector: A High-performance Marine Traffic Detector at Stream Scale," *ACM Distributed Event-based System Conference (DEBS)*, Hamilton, New Zealand, 2018
18. Chun-Xun Lin, Tsung-Wei Huang, T. Yu, and Martin D. F. Wong, "A Distributed Power Grid Analysis Framework from Sequential Stream Graph," *ACM Great Lakes Symposium (GLSVLSI)*, Chicago, IL, 2018
19. Chun-Xun Lin, Tsung-Wei Huang, and Martin D. F. Wong, "Routing at Compile Time," *IEEE International Symposium on Quality Electronic Design (ISQED)*, Santa Clara, CA, 2018
20. Tsung-Wei Huang, Chun-Xun Lin, and Martin D. F. Wong, "DtCraft: A Distributed Execution Engine for Compute-intensive Applications," *ACM/IEEE International Conference on Computer-aided Design (ICCAD)*, Irvine, CA, 2017
21. Tin-Yin Lai, Tsung-Wei Huang, and Martin D. F. Wong, "An Effective and Accurate Macro-modeling Algorithm for Large Hierarchical Designs," *ACM/IEEE Design Automation Conference (DAC)*, Austin, TX, 2017
22. Tsung-Wei Huang, Martin D. F. Wong, D. Sinha, K. Kalafala, and N. Venkateswaran, "A Distributed Timing Analysis Framework for Large Designs," *ACM/IEEE Design Automation Conference (DAC)*, Austin, TX, 2016
23. Tsung-Wei Huang and Martin D. F. Wong, "OpenTimer: A High-performance Timing Analysis Tool," *IEEE/ACM International Conference on Computer-aided Design (ICCAD)*, TX, 2015
24. Tsung-Wei Huang and Martin D. F. Wong, "On Fast Timing Closure: Speeding Up Incremental Path-Based Timing Analysis with MapReduce," *IEEE/ACM International Workshop on System-level Interconnect Prediction (SLIP)*, CA, 2015
25. Tsung-Wei Huang and Martin D. F. Wong, "Accelerated Path-Based Timing Analysis with MapReduce," *ACM International Symposium on Physical Design (ISPD)*, Monterey, CA, 2015
26. Tsung-Wei Huang, P-C. Wu, and Martin D. F. Wong, "Fast Path-Based Timing Analysis for CPPR," *IEEE/ACM ACM/IEEE International Conference on Computer-aided Design (ICCAD)*, San Jose, CA, 2014
27. Tsung-Wei Huang, P-C. Wu, and Martin D. F. Wong, "UI-Timer: An Ultra-Fast Clock Network Pessimism Removal Algorithm," *IEEE/ACM International Conference on Computer-aided Design (ICCAD)*, San Jose, CA, 2014
28. Tsung-Wei Huang, P-C. Wu, and Martin D. F. Wong, "UI-Route: An Ultra-Fast Incremental Maze Routing Algorithm," *IEEE/ACM International Workshop on System-level Interconnect Prediction (SLIP)*, San Francisco, CA, 2014
29. S.-H. Yeh, J.-W. Chang, Tsung-Wei Huang, and Tsung-Yi Ho, "Voltage-Aware Chip-Level Design for Reliability-Driven Pin-Constrained EWOD Chips," *IEEE/ACM International Conference on Computer-aided Design (ICCAD)*, San Jose, CA, 2012
30. Tsung-Wei Huang, J.-W. Chang, and Tsung-Yi Ho, "Integrated Fluidic-Chip Co-Design Methodology for Digital Microfluidic Biochips," *ACM International Symposium on Physical Design (ISPD)*, Napa, CA, 2012
31. J.-W. Chang, Tsung-Wei Huang, and Tsung-Yi Ho, "An ILP-based Obstacle-Avoiding Routing Algorithm for Pin-Constrained EWOD Chips," *IEEE/ACM Asia and South Pacific Design Automation Conference (ASPDAC)*, Sydney, Australia, 2012
32. Tsung-Wei Huang, Tsung-Yi Ho, and K. Chakrabarty, "Reliability-Oriented Broadcast Electrode-Addressing for

- Pin-Constrained Digital Microfluidic Biochips,” *IEEE/ACM International Conference on Computer-aided Design (ICCAD)*, San Jose, CA, 2011
33. Tsung-Wei Huang, Yan-You Lin, J.-W. Chang, and Tsung-Yi Ho, “Recent Research and Emerging Challenges in the Designs and Optimizations for Digital Microfluidic Biochips,” invited paper, *IEEE System on Chip Conference (SOCC)*, 2011.
  34. Tsung-Wei Huang, Yan-You Lin, J.-W. Chang, and Tsung-Yi Ho, “Chip-Level Design and Optimization for Digital Microfluidic Biochips,” invited paper, *IEEE International Midwest Symposium on Circuits and Systems (MWSCAS)*, 2011.
  35. P.-H. Yuh, C. C.-Y. Lin, Tsung-Wei Huang, Tsung-Yi Ho, C.-L. Yang, and Y.-W. Chang, “A SAT-Based Routing Algorithm for Cross-Referencing Biochips,” *IEEE/ACM International Workshop on System-level Interconnect Prediction (SLIP)*, San Diego, CA, June 2011.
  36. Tsung-Wei Huang, H.-Y. Su, and Tsung-Yi Ho, “Progressive Network-Flow Based Broadcast Addressing for Pin-Constrained Digital Microfluidic Biochips,” *ACM/IEEE Design Automation Conference (DAC)*, pp. 741-746, San Diego, CA, June 2011.
  37. Tsung-Wei Huang, S.-Y. Yeh, and Tsung-Yi Ho, “A Network-Flow Based Pin-Count Aware Routing Algorithm for Broadcast Electrode-Addressing EWOD Chips,” *IEEE/ACM International Conference on Computer-aided Design (ICCAD)*, pp. 425-431, San Jose, CA, 2010.
  38. Tsung-Wei Huang and Tsung-Yi Ho, “A Two-Stage Integer-Linear-Programming Based Droplet Routing Algorithm for Pin-Constrained Digital Microfluidic Biochips,” *ACM International Symposium on Physical Design (ISPD)*, pp. 201-208, San Francisco, CA, 2010.
  39. Tsung-Wei Huang, C.-H. Lin, and Tsung-Yi Ho, “A Contamination-Aware Droplet Routing Algorithm for Digital Microfluidic Biochips,” *IEEE/ACM International Conference on Computer-aided Design (ICCAD)*, pp. 151-156, San Jose, CA, 2009.
  40. Tsung-Wei Huang and Tsung-Yi Ho, “A Fast Routability- and Performance-Driven Droplet Routing Algorithm for Digital Microfluidic Biochips,” *IEEE International Conference on Computer Design (ICCD)*, pp. 445-450, Lake Tahoe, CA, 2009

## **JOURNAL**

1. Tsung-Wei Huang, Chun-Xun Lin, and Martin. D. F. Wong, “OpenTimer v2: A Parallel Incremental Timing Analysis Engine,” *IEEE Design and Test (DAT)*, vol. 38, no. 2, pp. 62-68, April 2021, 2021
2. Tsung-Wei Huang, Yibo Lin, Chun-Xun Lin, G. Guo, and Martin. D. F. Wong, “Cpp-Taskflow: A General-purpose Parallel Task Programming System at Scale,” *IEEE Transactions on Computer-aided Design of Integrated Circuits and Systems (TCAD)*, vol. 40, no. 8, pp. 1687-1700, Aug. 2021
3. Tsung-Wei Huang, G. Guo, Chun-Xun Lin, and Martin. D. F. Wong, “OpenTimer v2: A New Parallel Incremental Timing Analysis Engine,” *IEEE Transactions on Computer-aided Design of Integrated Circuits and Systems (TCAD)*, vol. 40, no. 4, pp. 776-789, April, 2021
4. Tsung-Wei Huang, Chun-Xun Lin, and Martin D. F. Wong, “DtCraft: A High-performance Distributed Execution Engine at Scale,” *IEEE Transactions on Computer-aided Design of Integrated Circuits and Systems (TCAD)*, vol. 38, no. 6, pp. 1070-1083, June 2018
5. Tsung-Wei Huang and Martin D. F. Wong, “UI-Timer 1.0: An Ultra-Fast Path-Based Timing Analysis Algorithm for CPPR,” *IEEE Transactions on Computer-aided Design of Integrated Circuits and Systems (TCAD)*, vol. 35, no. 11, pp. 1862-1875, Nov. 2016
6. S.-H. Yeh, J.-W. Chang, Tsung-Wei Huang, S.-T. Yu, and Tsung-Yi Ho, “Voltage-Aware Chip-Level Design for Reliability-Driven Pin-Constrained EWOD Chips,” *IEEE Transactions on Computer-aided Design of Integrated Circuits and Systems (TCAD)*, vol. 33, no.9, pp. 1302-1315, Sep. 2014.
7. J.-W. Chen, C.-L. Hsu, L.-C. Tsai, Tsung-Wei Huang, and Tsung-Yi Ho, “An ILP-Based Routing Algorithm for Pin-Constrained EWOD Chips with Obstacle Avoidance,” *IEEE Transactions on Computer-aided Design of Integrated Circuits and Systems (TCAD)*, vol. 32, no.11, pp. 1655-1667, Nov. 2013.

8. Y.-H. Chen, C.-L. Hus, Tsung-Wei Huang, and Tsung-Yi Ho, "A Reliability-Oriented Placement Algorithm for Reconfigurable Digital Microfluidic Biochips using 3D Deferred Decision-Making Technique," *IEEE Transactions on Computer-aided Design of Integrated Circuits and Systems (TCAD)*, vol. 32, no. 8, pp. 1151-1162, Aug. 2013.
9. J.-W. Chang, S.-H. Yeh, Tsung-Wei Huang, and Tsung-Yi Ho, "Integrated Fluidic-Chip Co-Design Methodology for Digital Microfluidic Biochips," *IEEE Transactions on Computer-aided Design of Integrated Circuits and Systems (TCAD)*, vol. 32, no. 2, pp. 216-227, Feb. 2013.
10. Tsung-Wei Huang, S.-Y. Yeh, and Tsung-Yi Ho, "A Network-Flow Based Pin-Count Aware Routing Algorithm for Broadcast-Addressing EWOD Chips," *IEEE Transactions on Computer-aided Design of Integrated Circuits and Systems (TCAD)*, vol. 30, no. 12, pp. 1786-1799, Dec. 2011.
11. Tsung-Wei Huang and Tsung-Yi Ho, "A Two-Stage Integer-Linear-Programming Based Droplet Routing Algorithm for Pin-Constrained Digital Microfluidic Biochips," *IEEE Transactions on Computer-aided Design of Integrated Circuits and Systems (TCAD)*, vol. 30, no. 2, pp. 215-228, Feb. 2011.
12. Tsung-Wei Huang, C.-H. Lin, and Tsung-Yi Ho, "A Contamination-Aware Droplet Routing Algorithm for the Synthesis of Digital Microfluidic Biochips," *IEEE Transactions on Computer-aided Design of Integrated Circuits and Systems (TCAD)*, vol. 29, no. 11, pp. 1682-1695, Nov. 2010.

## **PATENTS**

1. T.-W Huang, K. Kalafala, D. Sinha, and N. Venkateswaran, "Incremental Common Path Pessimism Analysis," *USA Patent*, 14/946043, 2015 (assignee: IBM)
2. Tsung-Wei Huang, K. Kalafala, D. Sinha, and N. Venkateswaran, "Distributed Timing Analysis of a Partitioned Integrated Circuit Design", *USA Patent*, 9916405B2, 03/13/2018 (assignee: IBM)

## **TALKS**

1. "HeteroTime: Accelerating Static Timing Analysis with GPUs," June, Nvidia Research, 2021
2. "Taskflow: A Lightweight Heterogeneous Task Programming System with Control Flow," CPPNow, 2021
3. "GPU-Accelerated Static Timing Analysis and Beyond," GTC, April 2021
4. "Machine Learning-enabled System for EDA," VLSI-DAT, April 2021
5. "GPU-Accelerated Static Timing Analysis," UCSC EDA Seminar, Feb 2021
6. "A General-purpose Parallel and Heterogeneous Task Programming System," CIE/USA-GNYC, Oct 2020
7. "Taskflow: Parallel and Heterogeneous Task Programming in C++," C++ Programmer Meetup, Oct 2020
8. "Taskflow: A General-purpose Parallel and Heterogeneous Task Programming System," CppIndia, Oct 2020
9. "Taskflow: A General-purpose Parallel and Heterogeneous Task Programming System," MUC++, Oct 2020
10. "Programming Systems for Parallelizing VLSI CAD and Beyond," VLSI-DAT, April 2020
11. "A General-purpose Parallel and Heterogeneous Task Programming System at Scale," ORNL, March 2020
12. "Growing Your Open-Source Projects," WOSET at IEEE/ACM ICCAD, November 2019
13. "Essential Building Blocks for Creating an Open-source EDA Project," IEEE/ACM DAC, June 2019
14. "Task-based Parallel Programming using Modern C++", CSL Social Hour, Sep 2018
15. "Distributed Timing Analysis in 100 Lines Code," VSD webinar, May 2018
16. "DtCraft: A High-performance Distributed Execution Engine at Scale," CSLSC, UIUC, IL, 2018
17. "OpenTimer: An open-source high-performance timing analysis tool," ORCONF, Bologna, Italy, 2016
18. "Distributed Timing Analysis: Framework and Systems," Cadence, Austin, June 2016
19. "OpenTimer: A High-performance Timing Analysis Tool," Special Session, IEEE/ACM ICCAD, 2015
20. "Fast Path-based Timing Analysis," Special Session, IEEE/ACM ICCAD, 2014

## **INDUSTRY EXPERIENCE**

<b>Software Engineer</b> – High-performance computing Group, Citadel, Chicago, IL	2017/06–2017/08
<b>Software Engineer</b> – Timing Group, IBM, Fishkill, NY	2015/05–2015/08

## **TEACHING EXPERIENCE**

**Instructor** – Object-oriented Programming, CS 1410, Utah (FA20)

**Instructor** – Advanced Programming, ECE 5960, Utah (SP20)

**Instructor** – Logic Synthesis, ECE 462, UIUC (SP19)

**Instructor** – Competitive Programming, CSIE 3001, NCKU (FA10, SP11)

**Teaching Assistant** – Computer System and Programming, ECE 220, UIUC (FA15, FA16, SP17)

**Teaching Assistant** – VLSI CAD: Logic to Layout, Coursera (SP16)

## **EXTERNAL SERVICE**

### **Journal Reviewer**

- IEEE Transaction on Computer-aided Design for Integrated Circuits and Systems (TCAD)
- IEEE Transaction on Very Large Scale Integration (TVLSI)
- IEEE Transaction on Big Data (TBD)
- ACM Transaction on Design Automation of Electronic Systems (TODAES)
- VLSI Integration Journal

### **Conference Reviewer**

- ACM International Symposium on Physical Design (ISPD)
- IEEE/ACM International Conference on Computer-aided Design (ICCAD)
- IEEE/ACM Design Automation Conference (DAC)
- IEEE/ACM Asia and South Pacific Design Automation Conference (ASPDAC)

### **Organizer**

- Co-chair, CAD Contest in IEEE/ACM ICCAD, 2020
- Publicity Chair, International Workshop on Logic Synthesis (IWLS), 2020
- Chair/Co-chair, ACM SIGDA CADathlon International Programming Contest, 2018-2020
- Chair, VSDOpen Online EDA Conference, 2018
- Co-chair, ACM TAU Timing Analysis Contest, 2018

### **Program Committee**

- ACM TAU Workshop, 2020-2021
- IEEE/ACM International Conference on Computer-aided Design (ICCAD), 2019-2021
- IEEE/ACM Asia and South Pacific Design Automation Conference (ASPDAC), 2020-2021
- IEEE International Conference on Computer Design (ICCD), 2020
- The C++ Conference (CppCon), 2019

## **INTERNAL SERVICE AT THE UNIVERSITY OF UTAH**

### **Department of Electrical and Computer Engineering**

- Graduate student and admission committee, 2021—present
- University of Utah Asia Campus students summer visit program committee, 2021—present
- University of Utah Asia Campus faculty recruiting committee, 2021—present
- Faculty recruiting committee, 2020