Aurojit Panda

Curriculum Vitae

60 Fifth Ave, Room 405
New York, NY 10011
+1 (401) 323 1524
apanda@cs.nyu.edu
https://cs.nyu.edu/~apanda

Research Interests

Computer Systems, Distributed Systems, Networking

Education

2011–2017 **Ph.D. Computer Science**, *University of California*, Berkeley, CA
Advisor: Scott Shenker

2004–2008 **Sc.B. Math–Computer Science**, *Brown University*, Providence, RI
Honors in Math–Computer Science
Advisor: Meinolf Sellmann

Professional Employment

Sep 2025– **Associate Professor**, *Courant Institute, New York University*, New York, NY
2018–2025 **Assistant Professor**, *Courant Institute, New York University*, New York, NY
2017–2018 **Researcher**, *International Computer Science Institute*, Berkeley, CA
2017–2018 **Software Developer**, *Nefeli Networks*, Berkeley, CA
2011–2017 **Research Assistant**, *UC Berkeley*, Berkeley, CA
2008–2011 **Software Developer**, *Microsoft*, Redmond, WA

Awards

- Google ML and Systems Junior Faculty Award 2025
- Jay Lepreau Best Paper Award, OSDI 2023
- Distinguished Artifact Award, OSDI 2023
- Distinguished Artifact Award, ASPLOS 2023
- EuroSys Test of Time Award 2023 (for BlinkDB)
- NSF Career Award 2021
- Google Research Scholar Award 2021
- VMWare Early Career Faculty Grant 2018
- Demetri Angelakos Memorial Achievement Award, Berkeley EECS 2016-17
- Best Student Paper, SIGCOMM 2015
- Best Paper, EuroSys 2013
- Qualcomm Innovation Fellowship 2012

Students Advised

- David Pissarra. PhD student co-advised with Jinyang Li (Fall 2024 – present)
- Qiutong Men. PhD student (Fall 2024 – present)
- Hexu Zhao. PhD student co-advised with Jinyang Li (Fall 2023 – present)
- Zhanghan Wang. PhD student (Fall 2022 – present)
- Ding Ding. PhD student co-advised with Jinyang Li (Fall 2021 – present)
- Tao Wang. PhD student co-advised with Anirudh Sivaraman (Fall 2019 – Fall 2025)
- Jinkun Lin. PhD student co-advised with Jinyang Li (Fall 2019 – Fall 2025)
- Anqi Zhang. PhD student co-advised with Jinyang Li (Fall 2019 – Fall 2025)
- Mayank Gupta. Masters student (Summer 2023 – Fall 2024)
- Vinayak Agarwal. Masters student (Summer 2021 – Fall 2022)
- Changgeng Zhao. Masters student (Fall 2018 – Fall 2021)
- Qiutong Men (now a PhD student). Undergraduate Student (Fall 2022 – Spring 2024)
- Richard Xu. Undergraduate Student (Summer 2022)
- Jeffery Wang. Undergraduate student (Summer 2021 – Fall 2023)
- Vivian Fang. Undergraduate student (Fall 2017 – Fall 2018)
- Truanne Chen. High School student (Summer 2023, NYU GSTEM)
- Leeann Shaw. High School student (Summer 2023, NYU GSTEM)
- Siann Han. High School student (Summer 2022, NYU GSTEM)

PhD Committees

- Ding Ding (NYU)
- Anqi Zhang (NYU)
- Jinkun Lin (NYU)
- Fabian Ruffy Vargas (NYU)
- Tao Wang (NYU)
- Devora Chait-Roth (NYU)
- Elaine Li (NYU)
- Nisarg Patel (NYU)
- Lingfan Yu (NYU)
- Ioanna Tzialla (NYU)
- Shiva R Iyer (NYU)
- Assimakis Kattis (NYU)
- Chien-Chin Huang (NYU)
- Lloyd Brown (UC Berkeley)

- Vivian Fang (UC Berkeley)
- Zhihong Luo (UC Berkeley)
- Wen Zhang (UC Berkeley)
- Aisha Mushtaq (UC Berkeley)
- Emmanuel Amaro (UC Berkeley)
- Michael Chang (UC Berkeley)
- Hugo Sadok (CMU)
- Akshay Narayan (MIT)

Publications

Conferences

[1] Zhanghan Wang, Ding Ding, Hang Zhu, Haibin Lin, and Aurojit Panda. It Takes Two to Entangle. In *ASPLOS*, 2026.

[2] Hexu Zhao, Xiwen Min, Xiaoteng Liu, Moonjun Gong, Yiming Li, Ang Li, Saining Xie, Jinyang Li, and Aurojit Panda. CLM: Removing the GPU Memory Barrier for 3D Gaussian Splatting. In *ASPLOS*, 2026.

[3] Ding Ding, Zhanghan Wang, Jinyang Li, and Aurojit Panda. Runtime Protocol Refinement Checking for Distributed Protocol Implementations. In *NSDI*, 2025.

[4] Jinkun Lin, Ziheng Jiang, Zuquan Song, Sida Zhao, Menghan Yu, Zhanghan Wang, Chenyuan Wang, Zuocheng Shi, Xiang Shi, Wei Jia, Zherui Liu, Shugang Wang, Ziheng Jiang, Haibin Lin, Xin Liu, Aurojit Panda, and Jinyang Li. Understanding Stragglers in Large Model Training Using What-if Analysis. In *OSDI*, 2025.

[5] Farbod Shahinfar, Sebastiano Miano, Aurojit Panda, and Gianni Antichi. Demystifying performance of ebpf network applications. In *CoNEXT*, 2025.

[6] Anqi Zhang, Yulin Chen, Jane Pan, Chen Zhao, Aurojit Panda, Jinyang Li, and He He. Reasoning Models Know When They're Right: Probing Hidden States for Self-Verification. In *COLM*, 2025.

[7] Hexu Zhao, Haoyang Weng, Daohan Lu, Ang Li, Jinyang Li, Aurojit Panda, and Saining Xie. On Scaling Up 3D Gaussian Splatting Training. In *ICLR*, 2025. **Oral presentation**.

[8] Lloyd Brown, Emily Marx, Dev Bali, Emmanuel Amaro, Debnil Sur, Ezra Kissel, Inder Monga, Ethan Katz-Bassett, Arvind Krishnamurthy, James McCauley, Tejas Natechania, Aurojit Panda, and Scott Shenker. An Architecture For Edge Networking Services. In *SIGCOMM*, 2024.

[9] Ioanna Tzialla, Jeffery Wang, Jingyi Zhu, Aurojit Panda, and Michael Walfish. Efficient Auditing of Event-driven Web Applications. In *EuroSys*, 2024.

[10] Zhiyuan Dong, Zhaoguo Wang, Zhang Xiaodong, Xu Xian, Changgeng Zhao, Haibo Chen, Aurojit Panda, and Jinyang Li. Fine-Grained Re-Execution for Efficient Batched Commit of Distributed Transactions. In *VLDB*, 2023.

[11] Jiawei Liu, Jinkun Lin, Fabian Ruffy, Cheng Tan, Jinyang Li, Aurojit Panda, and Lingming Zhang. NNSmith: Generating Diverse and Valid Test Cases for Deep Learning Compilers. In *ASPLOS*, 2023. **Distinguished Artifact Award**.

[12] Hugo Sadok, Nirav Atre, Zhipeng Zhao, Daniel S. Berger, James C. Hoe, Aurojit Panda, Justine Sherry, and Ren Wang. Ensō: A Streaming Interface for NIC-Application Communication. In *OSDI*, 2023. **Jay Lepreau Best Paper Award, Distinguished Artifact Award**.

[13] Vivian Fang, Lloyd Brown, William Lin, Wenting Zheng, Aurojit Panda, and Raluca Ada Popa. CostCO: An automatic modeling framework for secure multi-party computation. *IEEE European Symposium on Security and Privacy (EuroS&P)*, 2022.

[14] Tao Wang, Xiangrui Yang, Gianni Antichi, Anirudh Sivaraman, and Aurojit Panda. Isolation Mechanisms for High-Speed Packet-Processing Pipelines. In *NSDI*, 2022.

[15] Anqi Zhang, Jinkun Lin, Aurojit Panda, Mathias Lé cuyer, and Siddhatha Sen. Measuring the Effect of Training Data on Deep Learning Predictions via Randomized Experiments. In *ICML*, 2022.

[16] Wen Zhang, Eric Sheng, Michael Chang, Aurojit Panda, Mooly Sagiv, and Scott Shenker. Blockaid: Data Access Policy Enforcement for Web Applications. In *OSDI*, 2022.

[17] Kalev Alpernas, Aurojit Panda, Leonid Ryzhyk, and Mooly Sagiv. Cloud-Scale Runtime Verification of Serverless Applications. In *SoCC*, 2021.

[18] Wenting Zheng, Ryan Deng, Weikeng Chen, Raluca Ada Popa, Aurojit Panda, and Ion Stoica. Cerebro: A platform for multi-party cryptographic collaborative learning. In *USENIX Security*, 2021.

[19] Emmanuel Amaro, Christopher Branner-Augmon, Zhihong Luo, Amy Ousterhout, Marcos K. Aguilera, Aurojit Panda, Sylvia Ratnasamy, and Scott Shenker. Can Far Memory Improve Job Throughput? In *EuroSys*, 2020.

[20] Yotam Harchol, D. Bergemann, N. Feamster, E. Friedman, A. Krishnamurthy, Aurojit Panda, S. Ratnasamy, M. Schapira, and S. Shenker. A public option for the core. In *SIGCOMM*, 2020.

[21] Yotam Harchol, Aisha Mushtaq, Vivian Fang, James McCauley, Aurojit Panda, and Scott Shenker. Making Edge-Computing Resilient . In *SoCC*, 2020.

[22] Xuan Tang, Teseo Schneider, Shoaib Kamil, Aurojit Panda, Jinyang Li, and Daniele Panozzo. Eggs: Sparsity-specific code generation. In *Symposium on Geometry Processing*, 2020.

[23] Wen Zhang, Vivian Fang, Aurojit Panda, and Scott Shenker. Kappa: A Programming Framework for Serverless Computing. In *SoCC*, 2020.

[24] James McCauley, Barath Raghavan, Yotam Harchol, Aurojit Panda, and Scott Shenker. Enabling a Permanent Revolution in Internet Architecture. In *SIGCOMM*, 2019.

[25] Kalev Alpernas, Roman Manevich, Aurojit Panda, Mooly Sagiv, Scott Shenker, Sharon Shoham, and Yaron Velner. Abstract interpretation of stateful networks. In *Static Analysis. SAS*, 2018.

[26] Michael Alan Chang, Aurojit Panda, Domenic Bottini, Lisa Jian, Pranay Kumar, and Scott Shenker. Network Evolution for DNNs. In *SysML*, 2018.

[27] Xiaohe Hu, Arpit Gupta, Nick Feamster, Aurojit Panda, and Scott Shenker. Preserving privacy at ixps. In *APNet*, 2018.

[28] Radhika Mittal, Alex Shpiner, Aurojit Panda, Eitan Zahavi, Arvind Krishnamurthy, Sylvia Ratnasamy, and Scott Shenker. Revisiting Network Support for RDMA. In *NSDI*, 2018.

[29] Amin Tootoonchian, Aurojit Panda, Chang Lan, Melvin Walls, Katerina Argyraki, Sylvia Ratnasamy, and Scott Shenker. ResQ: Enabling SLOs in Network Function Virtualization. In *NSDI*, 2018.

[30] Amin Tootoonchian, Aurojit Panda, Aida Nematzadeh, and Scott Shenker. Distributed Shared Memory for Machine Learning. In *SysML*, 2018.

[31] Aurojit Panda, Ori Lahav, Katerina Argyraki, Mooly Sagiv, and Scott Shenker. Verifying Reachability in Networks with Mutable Datapaths. In *NSDI*, 2017.

[32] Aurojit Panda, Wenting Zheng, Xiaohe Hu, Arvind Krishnamurthy, and Scott Shenker. SCL: Simplifying Distributed SDN Control Planes. In *NSDI*, 2017.

[33] Shivaram Venkataraman, Aurojit Panda, Kay Ousterhout, Ali Ghodsi, Michael J. Franklin, Benjamin Recht, and Ion Stoica. Drizzle: Fast and adaptable stream processing at scale. In *SOSP*, 2017.

[34] Marco Chiesa, Ilya Nikolaevskiy, Slobodan Mitrovic, Aurojit Panda, Andrei Gurtov, Aleksander Madry, Michael Schapira, and Scott Shenker. The Quest for Resilient (Static) Forwarding Tables. In *INFOCOM*, 2016.

[35] Ethan J Jackson, Melvin Walls, Aurojit Panda, Justin Pettit, Ben Pfaff, Jarno Rajahalme, Teemu Koponen, and Scott Shenker. SoftFlow: A Middlebox Architecture for Open vSwitch. In *USENIX ATC*, 2016.

[36] Oded Padon, Kenneth McMillan, Aurojit Panda, Mooly Sagiv, and Sharon Shoham. Ivy: Interactive Verification of Parametrized Systems via Effectively Propositional Reasoning. In *PLDI*, 2016.

[37] Aurojit Panda, Sangjin Han, Keon Jang, Melvin Walls, Sylvia Ratnasamy, and Scott Shenker. NetBricks: Taking the V out of NFV. In *OSDI*, 2016.

[38] Colin Scott, Aurojit Panda, Vjeko Brajkovic, George Necula, Arvind Krishnamurthy, and Scott Shenker. Minimizing Faulty Executions of Distributed Systems. In *NSDI*, 2016.

[39] Yaron Velner, Kalev Alpernas, Aurojit Panda, Alexander Rabinovich, Mooly Sagiv, Scott Shenker, and Sharon Shoham. Some Complexity Results for Stateful Network Verification. In *Tools and Algorithms for the Construction and Analysis of Systems*, 2016.

[40] Shoumik Palkar, Chang Lan, Sangjin Han, Aurojit Panda, Keon Jang, Sylvia Ratnasamy, Luigi Rizzo, and Scott Shenker. E2: A Framework for Network Function Virtualization. In *SOSP*, 2015.

[41] Justine Sherry, Peter X. Gao, Soumya Basu, Aurojit Panda, Arvind Krishnamurthy, Christian Maciocco, Maziar Manesh, João Martins, Sylvia Ratnasamy, Luigi Rizzo, and Scott Shenker. Rollback Recovery for Middleboxes. In *SIGCOMM*, 2015.

[42] Colin Scott, Andreas Wundsam, Barath Raghavan, Aurojit Panda, Andrew Or, Jefferson Lai, Eugene Huang, Zhi Liu, Ahmed El-Hassany, Sam Whitlock, H.B. Acharya, Kyriakos Zarifis, and Scott Shenker. Troubleshooting Blackbox SDN Control Software with Minimal Causal Sequences. In *SIGCOMM*, 2014.

[43] Shivaram Venkatraman, Aurojit Panda, Ganesh Ananthanarayanan, Michael Franklin, and Ion Stoica. The Power of Choice in Data-Aware Cluster Scheduling. In *OSDI*, 2014.

[44] Sameer Agarwal, Barzan Mozafari, Aurojit Panda, Henry Milner, Samuel Madden, and Ion Stoica. BlinkDB: Queries with Bounded Errors and Bounded Response Times on Very Large Data. In *EuroSys*, 2013. **Best Paper, EuroSys Test of Time**.

[45] Junda Liu, Aurojit Panda, Ankit Singla, Brighten Godfrey, Michael Schapira, and Scott Shenker. Ensuring Connectivity via Data Plane Mechanisms. In *NSDI*, 2013.

[46] Joan Feigenbaum, Brighten Godfrey, Aurojit Panda, Michael Schapira, Scott Shenker, and Ankit Singla. Brief Announcement: On the Resilience of Routing Tables. In *Principles of Distributed Computing*, 2012.

[47] Daniel Heller, Aurojit Panda, Meinolf Sellmann, and Justin Yip. Model Restarts for Structural Symmetry Breaking. In *Principles and Practice of Constraint Programming*, pages 539–544, 2008.

Journals

[48] Marjory Blumenthal, Ramesh Govindan, Ethan Katz-Bassett, Arvind Krishnamurthy, James McCauley, Nick Merrill, Tejas Narechania, Aurojit Panda, and Scott Shenker.

Can we save the public internet? *ACM SIGCOMM Computer Communication Review*, page 18–22, feb 2024.

[49] Hari Balakrishnan, Sujata Banerjee, Israel Cidon, David Culler, Deborah Estrin, Ethan Katz-Bassett, Arvind Krishnamurthy, Murphy McCauley, Nick McKeown, Aurojit Panda, et al. Revitalizing the public internet by making it extensible. *ACM SIGCOMM Computer Communication Review*, 51(2):18–24, 2021.

[50] Anirudh Sivaraman, Thomas O Mason, Aurojit Panda, Ravi Netravali, and Sai Anirudh Kondaveeti. Network Architecture in the Age of Programmability. *SIGCOMM Computer Communication Review*, 50(1):38–44, 2020.

[51] Kalev Alpernas, Aurojit Panda, Alexander Moshe Rabinovich, Shmuel Sagiv, Scott Shenker, Sharon Shoham, and Yaron Velner. Some complexity results for stateful network verification. *Formal Methods in System Design*, pages 1–41, 2019.

[52] James McCauley, Aurojit Panda, Arvind Krishnamurthy, and Scott Shenker. Thoughts on Load Distribution and the Role of Programmable Switches. *SIGCOMM Computer Communication Review*, 49(1):18–23, 2019.

[53] James McCauley, Zhi Liu, Aurojit Panda, Teemu Koponen, Barath Raghavan, Jennifer Rexford, and Scott Shenker. Recursive SDN for Carrier Networks. *SIGCOMM Computer Communication Review*, 46(3):1–7, 2016.

[54] Aurojit Panda, James Murphy McCauley, Amin Tootoonchian, Justine Sherry, Teemu Koponen, Syliva Ratnasamy, and Scott Shenker. Open Network Interfaces for Carrier Networks. *SIGCOMM Computer Communication Review*, 46(1):5–11, 2016.

Workshops

[55] Muhammad Haseeb, Jinkun Geng, Radhika Mittal, Aurojit Panda, Srinivas Narayana, and Anirudh Sivaraman. Beyond Lamport, Towards Probabilistic Fair Ordering. In *HotNets*, 2025.

[56] Marco Molè, Farbod Shahinfar, Francesco Maria Tranquillo, Davide Zoni, Aurojit Panda, and Gianni Antichi. Performance Implications at the Intersection of AF_XDP and Programmable NICs. In *eBPF*, 2025.

[57] Micah Murray, Wen Zhang, Aisha Mushtaq, Natacha Crooks, Aurojit Panda, and Scott Shenker. Designing a Datacenter-wide Distributed Shared Log. In *HotOS*, 2025.

[58] Fabian Ruffy, Zhanghan Wang, Gianni Antichi, Aurojit Panda, and Anirudh Sivaraman. Incremental Specialization of Network Programs. In *HotNets*, 2024.

[59] Emmanuel Amaro, Stephanie Wang, Aurojit Panda, and Marcos K Aguilera. Logical memory pools: Flexible and local disaggregated memory. In *HotNets*, 2023.

[60] Lloyd Brown, Yash Kothari, Akshay Narayan, Arvind Krishnamurthy, Aurojit Panda, Justine Sherry, and Scott Shenker. How I Learned to Stop Worrying About CCA Contention. In *HotNets*, 2023.

[61] Hugo Sadok, Aurojit Panda, and Justine Sherry. Of Apples and Oranges: Fair Comparisons in Heterogenous Systems Evaluation. In *HotNets*, 2023.

[62] Farbod Shahnifar, Sebastiano Milano, Giuseppe Siracusano, Roberto Bifulco, Aurojit Panda, and Gianni Antichi. Automatic Kernel Offload using BPF. In *HotOS*, 2023.

[63] Wen Zhang, Aurojit Panda, and Scott Shenker. Access Control for Database Applications: Beyond Policy Enforcement. In *HotOS*, 2023.

[64] Will Sussman, Emily Marx, Venkat Arun, Akshay Narayan, Mohammad Alizadeh, Hari Balakrishnan, Aurojit Panda, and Scott Shenker. The Case for an Internet Primitive for Fault Localization. In *HotNets*, 2022.

[65] Hugo Sadok, Zhipeng Zhao, Valerie Choung, Nirav Atre, Daniel S. Berger, James Hoe, Aurojit Panda, and Justine Sherry. We Need Kernel Interposition Over the Network Dataplane. In *HotOS*, 2021.

[66] Emmanuel Amaro, Zhihong Luo, Amy Ousterhout, Arvind Krishnamurthy, Aurojit Panda, Sylvia Ratnasamy, and Scott Shenker. Remote Memory Calls. In *HotNets*, 2020.

[67] Akshay Narayan, Aurojit Panda, Mohammad Alizadeh, Hari Balakrishnan, Arvind Krishnamurthy, and Scott Shenker. Bertha: Tunneling through the Network API. In *HotNets*, 2020.

[68] Tao Wang, Hang Zhu, Fabian Ruffy, Xin Jin, Anirudh Sivaraman, Dan RK Ports, and Aurojit Panda. Multitenancy for fast and programmable networks in the cloud. In *HotCloud*, 2020.

[69] Yotam Harchol, Aisha Mushtaq, James McCauley, Aurojit Panda, and Scott Shenker. CESSNA: Resilient Edge-Computing. In *MECOMM*, pages 1–6, 2018.

[70] Anand Iyer, Aurojit Panda, Mosharaf Chowdhury, Aditya Akella, Scott Shenker, and Ion Stoica. Monarch: Gaining Command on Geo-Distributed Graph Analytics. In *HotCloud*, 2018.

[71] Anand Iyer, Aurojit Panda, Shivaram Venkatraman, Mosharaf Chowdhury, Aditya Akella, Scott Shenker, and Ion Stoica. Bridging the GAP: Towards Approximate Graph Analytics. In *GRADES-NDA*, pages 1–5, 2018.

[72] Marc Körner, Torsten M. Runge, Aurojit Panda, Sylvia Ratnasamy, and Scott Shenker. Open carrier interface: An open source edge computing framework. In *NEAT*, 2018.

[73] Abhiram Balasubramanian, Marek S. Baranowski, Anton Burtsev, Aurojit Panda, Zvonimir Rakamaric, and Leonid Ryzhyk. System Programming in Rust: Beyond Safety. In *HotOS*, 2017.

[74] Aurojit Panda, Mooly Sagiv, and Scott Shenker. Verification in the Age of Microservices. In *HotOS*, 2017.

[75] Ignacio Castro, Aurojit Panda, Barath Raghavan, Scott Shenker, and Sergey Gorinsky. Route Bazaar: Automatic Intedomain Contract Negotiation. In *HotOS*, 2015.

[76] Aurojit Panda, Katerina Argyraki, Mooly Sagiv, Michael Schapira, and Scott Shenker. New Directions for Network Verification. In *SNAPL*, 2015.

[77] Wenfei Wu, Li Erran Li, Aurojit Panda, and Scott Shenker. PRAN: Programmable Radio Access Networks. In *HotNets*, 2014.

[78] Sangjin Han, Norbert Egi, Aurojit Panda, Sylvia Ratnasamy, Guangyu Shi, and Scott Shenker. Network Support for Resource Disaggregation in Next-Generation Datacenters. In *HotNets*, 2013.

[79] James McCauley, Aurojit Panda, Martin Casado, Teemu Koponen, and Scott Shenker. Extending SDN to Large-Scale Networks. In *ONS Research Track*, 2013.

[80] Kay Ousterhout, Aurojit Panda, Joshua Rosen, Shivaram Venkataraman, Reynold Xin, Sylvia Ratnasamy, Scott Shenker, and Ion Stoica. The Case for Tiny Tasks in Compute Clusters. In *HotOS*, 2013.

[81] Aurojit Panda, Colin Scott, Ali Ghodsi, Teemu Koponen, and Scott Shenker. CAP for Networks. In *HotSDN*, 2013.

[82] Debayan Gupta, Aaron Segal, Aurojit Panda, Gil Segev, Michael Schapira, Joan Feigenbaum, Jenifer Rexford, and Scott Shenker. A New Approach to Interdomain Routing Based on Secure Multi-Party Computation. In *HotNets*, 2012.

Demos

[83] Sameer Agarwal, Anand P Iyer, Aurojit Panda, Samuel Madden, Barzan Mozafari, and Ion Stoica. Blink and It's Done: Interactive Queries on Very Large Data. In *VLDB*, pages 1902–1905, 2012.

Invited Talks

Detecting Distributed Systems Bugs (at runtime)
- UC Berkeley, Sky Seminar. October 2023.
- University of Wisconsin, Madison. October 2024.
- CMU PDL Seminar. November 2024.
- EPFL SURI. June 2025.

Programming the Edge
- Hebrew University Summer School on Networking. June 2019.
- Akraino Edge Summit. San Diego. August 2019.

A New Approach to Network Function Virtualization
- USC. February 2017.
- NYU. February 2017.
- University of Wisconsin. February 2017.
- University of Chicago. March 2017.

- MPI SWS. March 2017.
- EPFL. March 2017.
- UT Austin. April 2017.
- Microsoft Research. April 2017.
- IETF NFV Research Group. September 2017.

NetBricks: Taking the V out of NFV

- Intel Research. October 2016
- Google Platforms and Networking. October 2016

VMN: Verifying Networks with Mutable Datapaths

- NetPL Workshop. August, 2016.
- Dagstuhl - Formal Foundations for Networking. February 2015.

Service

To the community

- Program Committee Chair: HotNets 2023, HotOS 2025, NINeS 2026, NSDI 2027.
- Steering Committee Chair: HotNets 2025 to present.
- Steering Committee Member: HotNets 2023 to present, NINeS 2025 to present.
- Organizer: Dagstuhl Workshop: Programmable Host Networking 2024.
- Non-programm session Chair: SIGCOMM 2024.
- Program Committee Chair: HotNets 2023.
- Travel Grants Chair: ANCS 2018.
- Preview Sessions Chair: NSDI 2019.
- Publication Chair: SIGCOMM 2020.
- Student Research Competition Chair: SOSP 2021.
- Program Committee Member for:
  - SOSP (2023, 2024, 2025, 2026)
  - OSDI (2021, 2022, 2023, 2024, 2026)
  - SIGCOMM (2019, 2020, 2022, 2024, 2025, 2026)
  - NSDI (2019, 2020, 2022, 2023, 2025, 2026)
  - EuroSys (2019, 2025, 2026)
  - USENIX ATC (2019, 2020, 2026)
  - CoNext (2018, 2022, 2026)
  - HotNets (2018, 2021, 2022, 2023, 2024)
  - HotCloud (2020)
  - SIGCOMM CCR (2017, 2018, 2020)
  - SOSR (2018, 2020)
  - MobiSys (ERC 2018)
  - ANCS (2018)
  - EuroSys Doctoral Workshop (2018, 2022)
  - KBNets (2018)
  - SecSoN (2018)
  - EuroP4 (2019, 2020)
- Member of the advisory board for the National Deep Inference Fabric. 2024–present

To the department

- PhD admissions committee. 2018 – present.
- MS admissions committee. 2022 – present.
- Chair search committee. Spring 2024.