

RESEARCH INTERESTS	<ul style="list-style-type: none">• Operating systems and computer networking.
EXPERIENCE	<p>University of Virginia — Assistant Professor Charlottesville, VA 2025.07 – Present</p> <ul style="list-style-type: none">• Assistant Professor, Department of Computer Science. <p>Enfabrica — Member of Technical Staff Mountain View, CA 2024.07 – 2025.07</p> <ul style="list-style-type: none">• Member of Technical Staff.
EDUCATION	<p>Cornell University Ithaca, NY</p> <p><i>Ph.D. in Computer Science</i> 2018.08 – 2024.05</p> <ul style="list-style-type: none">• Overall GPA: 4.0/4.0.• Thesis: <i>Design Efficient Network Stacks/Protocols for Terabit Ethernet.</i>• Advisor: Prof. Rachit Agarwal. <p>Princeton University Princeton, NJ</p> <p><i>M.S.E. (thesis-track) in Computer Science</i> 2016 – 2018.06</p> <ul style="list-style-type: none">• Overall GPA: 3.95/4.0.• Thesis: <i>Network-Wide Heavy Hitter Detection For Real-Time Telemetry.</i>• Advisor: Prof. Jennifer Rexford. <p>University of Michigan Ann Arbor, MI</p> <p><i>B.S.E. in Computer Science, Summa Cum Laude</i> 2012 – 2016</p> <ul style="list-style-type: none">• Overall GPA: 3.956/4.0.
PROFESSIONAL ACTIVITIES	<p>Program Committee: USENIX NSDI 2026; ACM CoNEXT 2026; SOSP SysDW Workshop (2024).</p> <p>Community Service: SIGCOMM Artifact Evaluation Co-chair (2025).</p> <p>External Reviewer: <i>IEEE Transactions on Network and Service Management, IEEE Transactions on Mobile Computing, Computer Networks, IEEE Transactions on Consumer Electronics, IEEE Network Magazine.</i></p>
AWARDS AND HONORS	<ul style="list-style-type: none">• Meta Fellowship 2022• James B. Angell Scholar, University of Michigan 2014, 2015, 2016• Dean's List, University of Michigan 2013, 2014, 2015• University Honors, University of Michigan 2012, 2013, 2014, 2015

- PUBLICATIONS
1. Benny Rubin, Saksham Agarwal, **Qizhe Cai**, Rachit Agarwal. Fast and Safe Memory Protection for Networked Systems. *ACM SOSP*, 2024.
 2. Athinagoras Skiadopoulos, Zhiqiang Xie, Mark Zhao, **Qizhe Cai**, Saksham Agarwal, Jacob Adelman, David Ahern, Carlo Contavalli, Michael Goldflam, Vitaly Mayatskikh, Raghu Raja, Daniel Walton, Rachit Agarwal, Shrijeet Mukherjee, Christos Kozyrakis. High-throughput and Flexible Host Networking for Accelerated Computing. *USENIX OSDI*, 2024.
 3. Saksham Agarwal, **Qizhe Cai**, Rachit Agarwal, David Shmoys, Amin Vahdat. Harmony: A Congestion-free Datacenter Architecture. *USENIX NSDI*, 2024.
 4. **Qizhe Cai**, Midhul Vuppalapati, Jaehyun Hwang, Christos Kozyrakis, Rachit Agarwal. Towards μ s Tail Latency and Terabit Ethernet: Disaggregating the Host Network Stack. *ACM SIGCOMM*, 2022.
 5. **Qizhe Cai**, Mina Tahmasbi Arashloo, Rachit Agarwal. dcPIM: Near-Optimal Proactive Datacenter Transport. *ACM SIGCOMM*, 2022.
 6. **Qizhe Cai**, Shubham Chaudhary, Midhul Vuppalapati, Jaehyun Hwang, Rachit Agarwal. Understanding Host Network Stack Overheads. *ACM SIGCOMM*, 2021.
 7. Jaehyun Hwang, **Qizhe Cai**, Rachit Agarwal, Ao Tang. I10: A Remote Storage I/O Stack for High-Performance Network and Storage Hardware. *USENIX NSDI*, 2020.
 8. Rob Harrison, **Qizhe Cai**, Arpit Gupta, Jennifer Rexford. Network-Wide Heavy Hitter Detection with Commodity Switches. *ACM SOSR*, 2018.

- TALKS &
INVITED PRE-
SENTATIONS
1. **Fast & Safe I/O Memory Protection**. Purdue University, Oct 2025.
 2. **Building Networked Systems for Terabit Ethernet**. Sungkyunkwan University (SKKU), Korea, Oct 2025.
 3. **Towards μ s Tail Latency and Terabit Ethernet: Disaggregating the Host Network Stack**. Alibaba Group, 2023.
 4. **Understanding Host Network Stack Overheads**. Linux NetDev, 2021.