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EDUCATION

Massachusetts Institute of Technology.
M.S. Computer Science, 2019
Ph.D. Computer Science, 2022
    Advisors: Hari Balakrishnan, Mohammad Alizadeh.
University of California, Berkeley.
Bachelor of Science with High Honors, 2015.
Electrical Engineering and Computer Science. GPA 3.855.

EXPERIENCE

Brown University *July 2024 —*
Assistant Professor, Computer Science.
University of California, Berkeley *August 2022—June 2024*
Postdoctoral Research Fellow, NetSys Lab.
Microsoft Research *May 2018 — August 2018*
Research Intern in Mobility and Networking, advised by Behnaz Arzani.
University of California, Berkeley *Spring 2014 — August 2016*
Staff Researcher, NetSys Lab. Advised by Sylvia Ratnasamy and Scott Shenker.
Microsoft *May 2014 — August 2014*
Software Development Engineer Intern.
Operating Systems Group: Application Compatibility Team. Operating systems, APIs.
Jive Software *May 2013 — August 2013*
Engineering Intern. Platform API Team. Web development, distributed systems.
NASA Ames Research Center *May 2012 — November 2012*
Program Participant, Education Associates Program. Mobile development, graphics.

TEACHING

Brown University, Fall 2024. *CSCI 2680: Computer Networks and the Internet*
Instructor: Akshay Narayan.
MIT, Fall 2018. *6.829: Computer Networks.*
Instructors: Hari Balakrishnan and Mohammad Alizadeh.
IIT Madras, Summer 2017. *Data-Driven Networked Systems.*
Instructors: Hari Balakrishnan, Srinivas Narayana, Akshay Narayan.
UC Berkeley, Fall 2014. *CS168: Introduction to Computer Networks.*
Instructor: Sylvia Ratnasamy. Average Student Rating: 4.33 / 5

SERVICE

HotNets 2024 Technical Program Committee
ANRW 2024 Technical Program Committee
APNet 2024 Technical Program Committee

SIGCOMM CCR 2024 Invited Reviewer
NSDI 2024 Technical Program Committee
ANRW 2023 Technical Program Committee
SIGCOMM 2021 Artifact Evaluation Committee

Publications

- "Bringing Reconfigurability to the Network Stack" **Akshay Narayan**, Aurojit Panda, Hari Balakrishnan, Mohammad Alizadeh, Arvind Krishnamurthy, Scott Shenker. ArXiv PrePrint 2023 https://arxiv.org/abs/2311.07753 (under submission).

- "Principles for Internet Congestion Management" Lloyd Brown, Albert Gran Alcoz, Frank Cangialosi, **Akshay Narayan**, Mohammad Alizadeh, Hari Balakrishnan, Eric Friedman, Ethan Katz-Bassett, Arvind Krishnamurthy, Michael Schapira, Scott Shenker. *SIGCOMM 2024*

- "How I Learned to Stop Worrying About CCA Contention" Lloyd Brown, Yash Kothari, **Akshay Narayan**, Arvind Krishnamurthy, Aurojit Panda, Justine Sherry, Scott Shenker. *Hotnets 2023*

- "The Case for an Internet Primitive for Fault Localization" William Sussman, Emily Marx, Venkat Arun, **Akshay Narayan**, Mohammad Alizadeh, Hari Balakrishnan, Aurojit Panda, Scott Shenker. *Hotnets 2022*

- "Elasticity Detection: A Building Block for Internet Congestion Control" Prateesh Goyal, **Akshay Narayan**, Frank Cangialosi, Srinivas Narayana, Mohammad Alizadeh, Hari Balakrishnan. *SIGCOMM 2022*

- "Reproducible Experiments for Internet Systems" Frank Cangialosi, **Akshay Narayan** *P-RECS 2022*

- "Counterfeiting Congestion Control Algorithms" Margarida Ferreira, **Akshay Narayan**, Ines Lynce, Ruben Martins, Justine Sherry. *Hotnets 2021*

- "Site-to-Site Internet Traffic Control" Frank Cangialosi*, **Akshay Narayan***, Prateesh Goyal, Radhika Mittal, Mohammad Alizadeh, Hari Balakrishnan. *EuroSys 2021*, **Awarded Best Artifact.**

- "Bertha: Tunneling through the Network API." **Akshay Narayan**, Aurojit Panda, Mohammad Alizadeh, Hari Balakrishnan, Arvind Krishnamurthy, Scott Shenker. *Hotnets 2020*

- "Park: An Open Platform for Learning-Augmented Computer Systems." Hongzi Mao, Parimarjan Negi, **Akshay Narayan**, Hanrui Wang, Jiacheng Yang, Haonan Wang, Ryan Marcus, Ravichandra Addanki, Mehrdad Khani Shirkoohi, Songtao He, Vikram Nathan, Frank Cangialosi, Shaileshh Venkatakrishnan, Wei-Hung Weng, Song Han, Tim Kraska, Mohammad Alizadeh. *NeurIPS 2019*

- "Restructuring Endpoint Congestion Control." **Akshay Narayan**, Frank Cangialosi, Deepti Raghavan, Prateesh Goyal, Srinivas Narayana, Radhika Mittal, Mohammad Alizadeh, Hari Balakrishnan. *SIGCOMM 2018*

- "Sincronia: Near-Optimal Network Design for Coflows." Saksham Agarwal, Shijin Rajakrishnan, **Akshay Narayan**, Rachit Agarwal, David Shmoys, Amin Vahdat. *SIGCOMM 2018*, **Awarded Best Student Paper.**

- "The Case for Moving Congestion Control Out of the Datapath." **Akshay Narayan**, Frank Cangialosi, Prateesh Goyal, Srinivas Narayana, Mohammad Alizadeh, Hari Balakrishnan. *HotNets 2017*

- "Network Requirements for Resource Disaggregation." Peter Gao, **Akshay Narayan**, Sagar Karandikar, Joao Carreira, Sangjin Han, Rachit Agarwal, Sylvia Ratnasamy, Scott Shenker. *OSDI 2016*

- "pHost: Distributed Near-Optimal Datacenter Transport Over Commodity Network Fabric." Peter Gao, **Akshay Narayan**, Gautam Kumar, Rachit Agarwal, Sylvia Ratnasamy, Scott Shenker. *CoNEXT 2015*

Honors and Awards

EuroSys Best Artifact, *2021*
SIGCOMM Best Student Paper Award, *2018*
MIT NSF Graduate Research Fellowship, *2017*
MIT Jacobs Presidential Fellowship, *2016*
UC Berkeley Boeing Scholar, *2014*
UC Berkeley Eta Kappa Nu, *2012*
UC Berkeley Regents and Chancellors Scholar, *2011*