

EDUCATION

Massachusetts Institute of Technology.

M.S. Computer Science, 2019

Ph.D. Computer Science, August 2016 — May 2022

Advisors: Hari Balakrishnan, Mohammad Alizadeh.

University of California, Berkeley.

Bachelor of Science with High Honors, May 2015.

Electrical Engineering and Computer Science. GPA 3.855.

RESEARCH

Publications

- “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*
- “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*

TEACHING

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

EXPERIENCE

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.

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*