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Education

Massachusetts Institute of Technology.
M.S. Computer Science, 2019
Ph.D. Computer Science, August 2016 — Present
University of California, Berkeley.
Bachelor of Science with High Honors, May 2015.
Electrical Engineering and Computer Science. GPA 3.855.

Research

Publications

- "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.
UC Berkeley, Fall 2014. *CS168: Introduction to Computer Networks.*
Instructor: Sylvia Ratnasamy. Average Student Rating: 4.33 / 5

Experience

Microsoft
May 2018 — August 2018
Research Intern.
Microsoft Research: Mobility and Networking.
Wide-area end-to-end traffic optimization, datacenter transport.

University of California, Berkeley
Spring 2014 — August 2016
Staff Researcher, NetSys Lab.
Datacenter transport, resource disaggregation, container orchestration.

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*