

Gauri Joshi

<http://andrew.cmu.edu/user/gaurij>

Google Scholar

EMPLOYMENT

Carnegie Mellon University Pittsburgh PA	Jul 2022 – present
Associate Professor of Electrical and Computer Engineering	Sept 2017 – Jul 2022
Assistant Professor of Electrical and Computer Engineering	
Microsoft M365	
Visiting Researcher	Jan 2022 – Mar 2023
IBM T. J. Watson Research Center	Yorktown Heights NY
Research Staff Member	July 2016 – Aug 2017

EDUCATION

Massachusetts Institute of Technology	Sept 2012– Jun 2016
Ph.D in Electrical Engineering & Computer Science, GPA 5.0/5.0 (minor in Finance)	
<i>Thesis:</i> Using Redundancy to Reduce Latency in Cloud Systems	
Massachusetts Institute of Technology	Sept 2010– Jun 2012
S.M. in Electrical Engineering & Computer Science, GPA 5.0/5.0	
<i>Thesis:</i> On Playback Delay in Streaming Communication	Best Thesis Award
Indian Institute of Technology Bombay	Jul 2005–Jun 2010
B. Tech & M. Tech in Electrical Engineering; GPA 9.77/10.0	Institute Gold Medal
<i>Thesis:</i> On Relay-Assisted Cellular Networks	

SELECTED AWARDS AND HONORS

- Named as one of **MIT Technology Review's 35 innovators under 35** 2022
- Office of Naval Research Young Investigator Award 2022
- CMU College of Engineering Dean's Early Career Fellowship 2022
- **Best Paper Awards** at ACM MobiHoc 2022 and ACM SIGMETRICS 2020
- Faculty awards from Google, Facebook, IBM, Bosch Research
- **NSF CAREER Award** 2021
- **Distinguished Student Paper Award**, NeurIPS FedML Workshop 2019
- William Martin Memorial Award for **Best Masters Thesis** in Computer Science, MIT 2012
- Morris Joseph Levin Award for **Outstanding Oral Thesis Presentation**, MIT 2012
- Claude E. Shannon Research Assistantship, MIT 2015–2016
- Schlumberger **Faculty for the Future Fellowship** 2011–2015
- Irwin and Joan Jacobs Presidential Fellowship, MIT 2010–2011
- **Institute Gold Medal** for highest GPA in the undergraduate class, IIT Bombay 2010

PHD STUDENT AND POSTDOC ADVISING

- Ankur Mallick Fall 2017-Summer 2022
- Jianyu Wang Fall 2017-Summer 2022
- Samarth Gupta (co-advised with Prof. Osman Yağın) Fall 2017-Spring 2022
- Ting-Wu (Rudy) Chin (co-advised with Prof. Diana Marculescu) Spring 2020-Summer 2021
- Ahmet Inci (co-advised with Prof. Diana Marculescu) Spring 2020-Summer 2022
- Yae Jee Cho Fall 2019-present
- Tuhinangshu Choudhury (co-advised with Prof. Weina Wang) Fall 2019-present
- Divyansh Jhunjhunwala Fall 2020-present
- Jiin Woo (co-advised with Prof. Yuejie Chi) Fall 2021-present
- Pranay Sharma, post-doc Fall 2021-present
- Shuli Jiang Spring 2022-present
- Neharika Jali Fall 2022-present
- Baris Askin (co-advised with Prof. Carlee Joe-Wong) Fall 2022-present

TEACHING AND TEXTBOOK DEVELOPMENT

Courses Taught at Carnegie Mellon:

- *18-461/661: Introductory Machine Learning for Engineers* Spring 2019-present
Taken by ~ 100 students every semester and offered at Pittsburgh, SV and Rwanda campuses
- *18-667: Algorithms for Distributed Machine Learning* Fall 2017-present
Advanced graduate course covering the state-of-the-art algorithms for distributed machine learning and optimization. First ever course featuring federated learning, to my knowledge.

Textbook Development: Published a book based on 18-667 lecture notes, in the [Springer Nature Synthesis lecture series on Learning, Networks and Algorithms](#)

PUBLICATION RECORD

Published more than > 75 research papers, including > 16 journal papers and > 40 peer-reviewed conference papers. According to [Google Scholar](#), my work has been cited > 11000 times with an h-index of 37.

GRANTS AND CONTRACTS AWARDED TO DATE

The total share of funding (excluding start-up funding) awarded to my group to-date exceeds \$4 million, including 7 NSF Awards, grants from ONR and ARO grants, and industry awards from Google, IBM, Facebook, and Bosch.