

AYUSH MISHRA

CONTACT INFORMATION

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RESEARCH INTERESTS

Systems and Networking → Internet Congestion Control, TCP, QUIC.

EDUCATION

National University of Singapore, Singapore

PhD Candidate, Computer Science

Advisor: Dr. Ben Leong

Jan 2019 - Present (expected graduation May 2024)

National Institute of Technology, Trichy, Tamil Nadu, India

Bachelor of Technology, Computer Science and Engineering

May 2018

CGPA: 8.70/10.00

Global Indian International School, Singapore

Higher Secondary School Certificate Examination, CBSE

May 2014

Aggregate 95.6%

SELECTED PUBLICATIONS

Keeping an Eye on Congestion Control in the Wild with *Nebby*

Proceedings of SIGCOMM 2024

[Ayush Mishra](#), Lakshay Rastogi, Raj Joshi, and Ben Leong.

Containing the Cambrian Explosion in QUIC Congestion Control

Proceedings of IMC 2023

[Ayush Mishra](#) and Ben Leong.

Masking Corruption Packet Losses in Datacenter Networks with Link-local Retransmission

Proceedings of SIGCOMM 2023

Raj Joshi, Chaw Hwan Song, Xin Zhe Khooi, Nishant Budhdev, [Ayush Mishra](#), Mun Choon Chan, and Ben Leong.

Are we heading towards a BBR-dominated Internet?

Proceedings of IMC 2022

[Ayush Mishra](#), Tiu Wee Han, and Ben Leong.

Understanding Speciation in QUIC Congestion Control

Proceedings of IMC 2022

[Ayush Mishra](#), Sherman Lim, and Ben Leong.

LinkGuardian: Mitigating the impact of packet corruption loss with link-local retransmission

Proceedings of APNet 2022

Raj Joshi, Qi Guo, Nishant Budhdev, [Ayush Mishra](#), Mun Choon Chan, Ben Leong

Conjecture: Existence of Nash Equilibria in Modern Internet Congestion Control

Proceedings of APNet 2021

[Ayush Mishra](#), Jingzhi Zhang, Melodies Sim, Sean Ng, Raj Joshi, and Ben Leong.

The Great Internet TCP Congestion Control Census.

Proceedings of SIGMETRICS 2020

[Ayush Mishra](#), Xiangpeng Sun, Atishya Jain, Sameer Pande, Raj Joshi, and Ben Leong.

AWARDS	Research Achievement Award January 2024, January 2023, January 2020 School of Computing, National University of Singapore	
	Award for Excellence in Teaching January 2021, January 2022 School of Computing, National University of Singapore	
	INSPIRE Scholarship for Higher Education July 2014 Department of Science and Technology (DST) Ministry of Science and Technology, Government of India	
	APJ Abdul Kalam Award for Academic Proficiency June 2012 Global Indian International School, Singapore	
SERVICE	Contributed reviews: SIGCOMM (2024), NSDI (2024), INFOCOM (2024), IMC (2023), ICNP (2023, 2022, 2021), APNet (2021), ACM HotNets (2020)	
TECHNICAL SKILLS	Programming:	Over 5000 lines: C, C++, Python, Bash
	Mobile and Web Technologies:	Familiar: Java, Go, Rust
	Networking:	Android, Django, HTML, CSS, JavaScript P4-16, OpenFlow, Mininet, Docker
PROFESSIONAL EXPERIENCE	HP Enterprises, Singapore Software Development Intern May, 2016 - June, 2016	
	<ul style="list-style-type: none"> • Team Polling Web application: <ul style="list-style-type: none"> - Designed and built a Polling and Feedback application using Django that was deployed on the HPE cloud. - The application proved to be an effective productivity tool and was adopted by the Hybrid-APJ cloud computing team. 	
TEACHING EXPERIENCE	Teaching Assistant, CS1010X: Programming Methodology Jan, 2019 - June, 2019, Instructor: <i>Dr. Ben Leong</i> , Mean Student Rating: 4.1/5.0	
	Jan, 2020 - June, 2020, Instructor: <i>Dr. Tan Tiow Seng</i> , Mean Student Rating: 4.4/5.0	
	Teaching Assistant, CS1231S: Discrete Structures Jan, 2021 - May, 2021, Instructor: <i>Dr. Aaron Tan</i> , Mean Student Rating: 4.7/5.0	
	Teaching Assistant, CS5229: Advanced Computer Networks Aug, 2021 - Dec, 2021, Instructor: <i>Dr. Ben Leong</i>	