Divyanshu Saxena

Education

Ph.D., Computer Sciences | The University of Texas at Austin | Advisor: Prof. Aditya Akella 2021–Present

B.Tech, CSE | Indian Institute of Technology, Delhi 2016–2020

Publications

Research Interests: Microservices and Cloud Deployments, ML for Systems

Papers....

- **Divyanshu Saxena**, William Zhang, Shankara Pailoor, Isil Dillig, and Aditya Akella. *Copper and Wire: Bridging Expressiveness and Performance for Service Mesh Policies*. In **ASPLOS'25**. *Also appeared as a poster in NSDI'23*.
- Tao Ji, Divyanshu Saxena, Brent E. Stephens, and Aditya Akella. 2023. Yama: Providing Performance Isolation for Black-Box Offloads. In SoCC'23.
- Divyanshu Saxena, Tao Ji, Arjun Singhvi, Junaid Khalid, and Aditya Akella. Memory deduplication for serverless computing with Medes. In EuroSys'22. Also appeared as an invited paper in SIGOPS Operating Systems Review.

Workshop and Short Papers

- o Divyanshu Saxena, Nihal Sharma, Donghyun Kim, Rohit Dwivedula, Jiayi Chen, Chenxi Yang, Sriram Ravula, Zichao Hu, Aditya Akella, et. al. 2023. *On a Foundation Model for Operating Systems*. In MLSys at NeurIPS'23.
- Divyanshu Saxena, William Zhang, Madhav Tummala, Saksham Goel, and Aditya Akella. 2023. *Invited Paper: Towards Efficient Microservice Communication*. In AppLIED at PODC '23.

Pre-prints.

- Chenxi Yang, Divyanshu Saxena, Rohit Dwivedula, Kshiteej Mahajan, Swarat Chaudhuri, and Aditya Akella. 2024.
 C3: Learning Congestion Controllers with Formal Certificates.
- o Jeremy Carleton, Prathik Vijaykumar, **Divyanshu Saxena**, Dheeraj Narasimha, Srinivas Shakkottai, and Aditya Akella. 2024. *CONGO: Compressive Online Gradient Optimization with Application to Microservices Management.*
- Le Xu, Divyanshu Saxena, Neeraja J. Yadwadkar, Aditya Akella, and Indranil Gupta. 2023. Dirigo: Self-scaling Stateful Actors For Serverless Real-time Data Processing.

Professional Experience

Microsoft Research Research Intern at Networking Research Group	May 2022 - Aug 2022
Joint Seat Allocation Authority (JoSAA) Software Intern	Feb 2020 - Oct 2020
Indian Institute of Science, Bangalore Research Intern with Prof. Yogesh Simmhan	Jul 2020 - Sep 2020
Cohesity Member of Technical Staff Intern	May 2019 - Jul 2019
National University of Singapore Research Intern with Prof. Andrew Lim	May 2018 - Jul 2018

Scholastic Achievements

- Awarded a **Departmental Scholarship** of USD3000 for the academic session 2020-21 at the UW-Madison.
- o Secured All India Rank 64 in Joint Entrance Exam Advanced 2016 among 1.5 million applicants.
- Secured All India Rank 61 in Kishore Vaigyanik Protasahan Yojana (KVPY) 2015 conducted by IISc Bangalore.
- o Secured All India Rank 1 in FIITJEE Talent Reward Examination (FTRE) 2014 conducted by FIITJEE Ltd.
- o Conferred a nine-year scholarship on qualifying **National Talent Search Examination** (2012), conducted by NCERT.

Teaching Experience

Mentor Directed Reading Program (DiRP), Emerging Cloud Infrastructure	Fall 2023
Teaching Assistant Programming III, at UW-Madison	Fall 2020
Teaching Assistant Artificial Intelligence, at IIT Delhi	Fall 2019

Volunteering Experience

Student Volunteer | HotNets'22 hosted in Austin

Artifact Evaluation Committee | OSDI+ATC'22, SOSP'23