

Mayank Singh

Tucson, AZ, USA | mayanks43@gmail.com | (201) 920-1933 | mayanks43.github.io

Education

University of Arizona, College of Science Ph.D., Computer Science	Tucson, AZ, USA Aug. 2023 – Present
New York University, Courant Institute of Mathematical Sciences (CIMS) M.S., Computer Science	New York, NY, USA Sept. 2014 – May 2016
Birla Institute of Technology and Science (BITS), Pilani – Goa Campus B.E. (Hons.), Computer Science	Zuarinagar, GA, India Aug. 2009 – Aug. 2013

Recent Work Experience

University of Arizona <i>Research Assistant, Department of Computer Science</i>	Tucson, AZ, USA Aug. 2023 – Present
<ul style="list-style-type: none">Conducting research on reasoning models and multi-agent systems under Prof. Eduardo Blanco.	
ServiceNow, Inc. <i>Senior Research Scientist Intern</i>	Kirkland, WA, USA May 2025 – Aug. 2025
<ul style="list-style-type: none">Conducted research within the Core LLM team on better approaches to discovering multi-agent systems.	
Maplebear, Inc. (Instacart) <i>Senior Machine Learning Engineer</i>	San Francisco, CA, USA Apr. 2023 – Aug. 2023
<ul style="list-style-type: none">Developed incentive optimization algorithms for shoppers during high-demand periods while working in the Availability & Coordination team.	
Meta Platforms, Inc. (Facebook) <i>Senior Software Engineer/Machine Learning Engineer</i>	Menlo Park, CA, USA June 2016 – Jan. 2023
<ul style="list-style-type: none">Led the relevance and integrity areas in the Video Search Ranking team to improve the relevance of video search results to user queries and reduce the prevalence of inappropriate content.Created and improved product features for Facebook Search as part of the Content Search Product team.Worked on the Newsfeed Recommendations team to deliver better Reels recommendations to users.	

Publications

- Mayank Singh, Vikas Yadav, and Eduardo Blanco. 2026.
Error Taxonomy-Guided Prompt Optimization.
Under submission at an A* conference. [ArXiv](#)
- Mayank Singh, Vikas Yadav, Shiva Krishna Reddy Malay, Shravan Nayak, Sai Rajeswar, Sathwik Tejaswi Madhusudhan, and Eduardo Blanco. 2025.
Grammar Search for Multi-Agent Systems.
Reviewed at ACL Rolling Review (October 2025; Meta-review score: 4). [ArXiv](#)
- Mayank Singh and Eduardo Blanco. 2024.
Learning to Generate Rules for Realistic Few-Shot Relation Classification: An Encoder-Decoder Approach.
In Findings of the Association for Computational Linguistics: EMNLP 2024, Association for Computational Linguistics, Miami, USA. [Link](#)
- Gajamohan Mohanarajah, Vladyslav Usenko, Mayank Singh, Raffaello D'Andrea, and Markus Waibel. 2015.
Cloud-Based Collaborative 3D Mapping in Real-Time with Low-Cost Robots.
IEEE Transactions on Automation Science and Engineering 12, 2 (2015), 423 – 431. [Link](#)

Additional Work Experience

Facebook, Inc.

Software Engineer Intern, Video Ads

Menlo Park, CA, USA
June 2015 – Aug. 2015

- Added support for creating Video Ads using Light-Weight Interfaces in Facebook Pages.

Cisco Systems (India) Private Limited

Software Engineer I

Bengaluru, KA, India
Aug. 2013 – Aug. 2014

- Contributed to implementing IP tunneling, key exchange, and cryptographic algorithms for the Cisco IOS and IOS-XR network operating systems.

ETH Zurich

Research Intern

Zurich, ZH, Switzerland
Jan. 2013 – June 2013

- Conducted Cloud Robotics research under Dr. Gajamohan Mohanarajah and Prof. Raffaello D'Andrea at the Institute of Dynamic Systems and Control.

Python Software Foundation

Google Summer of Code

Remote
Summers 2011 & 2012

- Extended hardware support in PySoy, a Linux game engine, by building a Wiimote IR pointer driver and a Bluetooth plugin for PlayStation 3 controllers.

Other Experience

- Served as reviewer for ACL Rolling Review (5 cycles), COLING 2025, and Journal of Computational Linguistics.
- Earned a certificate in Statistics and Data Science from the MITx MicroMasters Program in December 2020.
- Teaching Assistant for Deep Learning (Spring 2016) and Financial Software Projects (Fall 2015) at New York University.
- Mentor for Google Summer of Code (2015) and Google Code-in (2012) with the CopyLeft Games Group.
- Represented New York University at the ACM ICPC Greater NY Regionals in 2014.

Useful Links

LinkedIn: [linkedin.com/in/mayanks43/](https://www.linkedin.com/in/mayanks43/)

GitHub: github.com/mayanks43