

Mayank Singh

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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
Conducting research on AI agents and agentic systems under Prof. Eduardo Blanco.	
ServiceNow, Inc. <i>Senior Research Scientist Intern</i>	Kirkland, WA, USA May 2026 – Aug. 2026
Conducted research within the Core AI team on approaches to improving the harnesses around LLMs in agentic systems.	
ServiceNow, Inc. <i>Senior Research Scientist Intern</i>	Kirkland, WA, USA May 2025 – Aug. 2025
Conducted research within the Core LLM team on better approaches to building multi-agent LLM systems.	
Maplebear, Inc. (Instacart) <i>Senior Machine Learning Engineer</i>	San Francisco, CA, USA Apr. 2023 – Aug. 2023
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
- 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. 2026.
Grammar Search for Multi-Agent Systems. In Proceedings of the 64th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), Association for Computational Linguistics, San Diego, USA. (Oral) [Link](#)
- 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

- Conference/Journal Reviewing Experience:
 - NeurIPS 2026
 - ACL Rolling Review (Oct. 2024, Dec. 2024, May 2025, Oct. 2025, Jan. 2026)
 - COLING 2025
 - Journal of Computational Linguistics
- Teaching Assistant Experience:
 - Algorithms, Spring 2026, University of Arizona
 - Automata, Grammars and Languages, Fall 2025, University of Arizona
 - Deep Learning, Spring 2016, New York University
 - Financial Software Projects, Fall 2015, New York University
 - Music Software Projects, Fall 2015, New York University
- Earned a certificate in Statistics and Data Science from the MITx MicroMasters Program in December 2020.
- 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/