Mayank Singh

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

Education

University of Arizona, College of Science Tucson, AZ, USA
Ph.D., Computer Science Aug. 2023 – Present

New York University, Courant Institute of Mathematical Sciences (CIMS) New York, NY, USA
M.S., Computer Science Sept. 2014 – May 2016

Birla Institute of Technology and Science (BITS), Pilani – Goa Campus Zuarinagar, GA, India
B.E. (Hons.), Computer Science Aug. 2009 – Aug. 2013

Recent Work Experience

University of Arizona Tucson, AZ, USA
Research Assistant, Department of Computer Science Aug. 2023 – Present
- Conducting research on reasoning models and multi-agent systems under Prof. Eduardo Blanco.

ServiceNow, Inc. Kirkland, WA, USA
Senior Research Scientist Intern May 2025 – Aug. 2025
- Conducted research within the Core LLM team on better approaches to discovering multi-agent systems.

Maplebear, Inc. (Instacart) San Francisco, CA, USA
Senior Machine Learning Engineer 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) Menlo Park, CA, USA
Senior Software Engineer/Machine Learning Engineer 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, Shiva Krishna Reddy Malay, Shravan Nayak, Sai Rajeswar, Sathwik Tejaswi Madhusudhan, and Eduardo Blanco. 2025.
  Grammar Search for Multi-Agent Systems. Under review at ACL Rolling Review (October 2025).
- 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. Menlo Park, CA, USA
Software Engineer Intern, Video Ads June 2015 – Aug. 2015
- Added support for creating Video Ads using Light-Weight Interfaces in Facebook Pages.

Cisco Systems (India) Private Limited   Bengaluru, KA, India
Software Engineer I   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   Zurich, ZH, Switzerland
Research Intern   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   Remote
Google Summer of Code   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

- 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/

GitHub: github.com/mayanks43