

# Himanshu Gaurav Singh

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## EDUCATION

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2023-ongoing PhD, **University of California, Berkeley** (4.0/4.0)  
2019-23 Bachelors in Computer Science at **IIT, Delhi** (**GPA: 9.96/10, Institute Rank: 2**)  
2018-19 Senior High School(CBSE) (99.0%)

## PUBLICATIONS

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- [1] Daman\* Arora, **Singh, Himanshu\***, and Mausam. “Have LLMs Advanced Enough? A Challenging Problem Solving Benchmark For Large Language Models”. In: *Proceedings of the 2023 Conference on Empirical Methods in Natural Language Processing*. Singapore: Association for Computational Linguistics, Dec. 2023, pp. 7527–7543. URL: <https://aclanthology.org/2023.emnlp-main.468>.
- [2] Namasivayam Kalithasan\*, **Himanshu Gaurav Singh\***, Vishal Bindal\*, Arnav Tuli, Vishwajeet Agrawal, Rahul Jain, Parag Singla, and Rohan Paul. “Learning Neuro-symbolic Programs for Language-Guided Robotic Manipulation”. In: *NeurIPS’ 22 Workshop on Neuro Causal and Symbolic AI (nCSI)*. Full paper accepted at *ICRA ’23*. URL: <http://arxiv.org/abs/2211.06652>.

## WORK EXPERIENCE

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- Undergraduate Researcher** at *Robotics and Embodied-AI Lab, IIT Delhi* October 2021 - June 2023
- Explored neuro-symbolic architectures for multi-step object manipulation and task planning with the goal of strong combinatorial generalization on task complexity. Full paper accepted at **ICRA’23**.
- Research Assistant** at *Extreme Classification Lab, IIT Delhi* October 2022 - June 2023
- Exploring graph-based approaches to learning better representations of the label space for the problem of multi-label extreme classification.
- Quantitative Researcher Intern** at *Tower Research Capital* June 2022 - Aug 2022
- Explored machine learning models to capture the movement of stock prices over time intervals longer than those dealt by conventional HFT strategies.
  - Improved the prediction correlation to the actual price movement by **400%**. Received **PPO**(declined)
- Software Engineer Intern** at *N.K.Securities(hypergrowth trading startup)* June 2021 - Aug 2021
- Designed and built a trading engine simulating the event model of a stock exchange used for back-testing trading algorithms.

## AWARDS

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- **All India Rank 2 in JEE-Advanced, 2019** among **2 million candidates nationwide**.
- Received the **IIT Delhi Semester Merit Award**(top 7%) in **all semesters**.
- Selected among 50 students worldwide to attend the **Cornell Maryland Max Planck Research Summer School, 2022** held at **Max Planck Institute for Software Systems**.
- Received **Aditya Birla Scholarship, 2019**, among 16 students of the engineering stream nationwide.
- Received **Bronze medal** at the **Asia Pacific Mathematics Olympiad, 2018**.
- **Ranked 4th** in KVPY(SA),2018: science examination conducted by the **Indian Institute Of Science, Bangalore** among **1,00,000 candidates nationwide**.