Ayush Sawarni

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Education

2021–2023 Indian Institute of Science, Bangalore,

M.Tech(Research) Computer Science

GPA: **9.5**/10.

Courses: Computational Methods of Optimization, Stochastic Models and Applications, Foundations of Data Science, Reinforcement Learning, Algorithms under Uncertainty

2014–2018 Birla Institute of Technology and Science, Pilani,

B.E.(Hons.) Electrical and Electronics GPA: **8.4**/10.

Experience

2023-Present Microsoft Research, Bangalore.

RESEARCH FELLOW

Computationally and statistically efficient algorithms online learning with non-linear rewards.

2021–2023 Indian Institute of Science, Bangalore.

RESEARCH STUDENT

Thesis 🗗 - Bandit Algorithms: Fairness, Welfare and Applications in Causal Inference. **Teaching Assistant** for the graduate course on Design and Analysis of Algorithms.

2018–2021 **Goldman Sachs**.

STRAT ANALYST

Built surveillance models and analytics to detect trade anomalies and fraudulent activities.

Summer 2017 Samsung R&D Institute, Noida.

SUMMER INTERN

Video analytics for Samsung Galaxy smartphones.

Publications

- 1 Ayush Sawarni, Soumyabrata Pal, Siddharth Barman. "Nash regret guarantees for linear bandits". To appear in 37th Conference on Neural Information Processing Systems (Paper ☑, NeurIPS 2023)
- 2 Ayush Sawarni, Rahul Madhavan, Gaurav Sinha, Siddharth Barman "Learning good interventions in causal graphs via covering". Proceedings of the Thirty-Ninth Conference on Uncertainty in Artificial Intelligence. (Paper ☑, UAI 2023)
- 3 Siddharth Barman, Arindam Khan, Arnab Maiti, <u>Ayush Sawarni</u> (Alphabetical Order). "Fairness and welfare quantification for regret in multi-armed bandits". Proceedings of the AAAI Conference on Artificial Intelligence. (Paper 2, AAAI 2023) [Oral Presentation, Talk 2]

Working Papers

• "Efficient algorithms for contextual logistic bandits with limited adaptivity" with Gaurav Sinha, Siddharth Barman

Honors and Awards

- 2023 Received Google Travel Grant for attending NeuRIPS.
- 2023 Received Microsoft Travel Grant for attending UAI.
- 2022 **Reliance Foundation Scholar**. Selected as one of the 40 postgraduate students in India to receive the Reliance Foundation Scholarship.
- 2021 Secured **All India Rank 3** out of 100,000 candidates in the Graduate Aptitude Test in Engineering (GATE) in Computer Science with a perfect score of 1000/1000. The exam tests students on mathematical aptitude and undergraduate courses in computer science.
- 2018 Winner at the India-EU ICT Standards OneM2M Hackathon.
- 2016 Secured the Runner-up position in a prestigious nationwide robotics competition organized by the Ministry of Human Resource Development (MHRD), India.

Skills

Python, C, C++, Java, Scala Linux, Git

Programming Languages
Tools and Systems

Academic Service and Extracurricular Activities

- Reviewer for SOSA 2023.
- **Teaching Volunteer** for National Service Scheme from 2014–2016. Taught computer applications to underprivileged women and kids in Pilani and nearby villages.
- Music Active member of the music club at IISc.