

# Ayush Sawarni

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📄 [Personal Webpage](#)

## 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  
Bandit algorithms for large action space with non-linear rewards.
- 2021–2023 **Indian Institute of Science, Bangalore.**  
RESEARCH STUDENT  
Thesis: Online Learning, Optimization, and 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 Bounds 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, [Ayush Sawarni](#) (Alphabetical Order). “**Fairness and Welfare Quantification for Regret in Multi-Armed Bandits**”. Proceedings of the AAAI Conference on Artificial Intelligence. ([Paper](#) , [AAAI 2023](#)) [[Oral Presentation](#), [Talk](#) ]

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## Honors and Awards

- 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) with a perfect score of 1000/1000.
- 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.

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## Skills

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

*Programming Languages*  
*Tools and Systems*

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## 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.