Sourav Sahoo

Operations Research Center, Massachusetts Institute of Technology Email & Website & Google Scholar & Github

Research Interests

Online Leaning, Game Theory, Learning Theory, Market Design.

Education

Doctor of Philosophy in Operations Research

Massachusetts Institute of Technology

Advisor: Prof. Negin Golrezaei

Dual Degree (B.Tech & M.Tech) in Electrical Engineering

Indian Institute of Technology, Madras

Advisor: Prof. Abhishek Sinha Thesis: The k-experts Problem.

Publications, Preprints and Technical Reports

C4. Learning Safe Strategies for Value Maximizing Buyers in Uniform Price Auctions

ICML 2025, 42nd International Conference on Machine Learning, Negin Golrezaei and Sourav Sahoo.*

C3. Distributed Online Optimization with Byzantine Adversarial Agents.

ACC 2022, 41st American Control Conference, Sourav Sahoo, Anand Gokhale, and Rachel Kalaimani.

C2. k-experts - Online Policies and Fundamental Limits

AISTATS 2022, 25th International Conference on Artificial Intelligence and Statistics, Samrat Mukhopadhyay, Sourav Sahoo, and Abhishek Sinha.

C1. A Segment Level Approach to Speech Emotion Recognition Using Transfer Learning

 $ACPR\ 2019,\ 5th\ Asian\ Conference\ on\ Pattern\ Recognition,$ Sourav Sahoo, Puneet Kumar, Balasubramanian Raman, and Partha Roy.

W1. Multi-Modal Detection of Alzheimer's Disease from Speech and Text

BIOKDD 2021, 20th International Workshop on Data Mining in Bioinformatics, Amish Mittal[†], Sourav Sahoo[†], Arnhav Datar[†], Juned Kadiwala[†], Hrithwik Shalu, and Jimson Mathew.

Industry Experience

Quantitative Research Analyst

JPMorgan Chase & Co.

July 2022 - July 2023 Mumbai, India

Sept. 2023 - Present

July 2017 - July 2022

GPA: 9.56/10.00

GPA: 5.0/5.0

Data Science Intern

Gramophone - $Transforming\ Agriculture$

Dec 2019 - Jan 2020 Bengaluru, India

Awards and Honors

First Place in MIT ORC Common Experience Deep Learning Challenge in 2024.

Caltech Summer Undergraduate Research Fellowship (SURF) in 2020.

All India Rank 49 among 1.5 million applicants in JEE Mains 2017.

Gold Medal in Indian National Physics Olympiad, 2017.

 $^{^*}$ Alphabetical

[†] Equal contribution

All India Rank 18 in Kishore Vaigyanik Protsahan Yojana, 2015. Certificate of Merit in Indian National Mathematical Olympiad, 2015.

Teaching Experience

Teaching Assistant for EE1102: Introduction to Programming.

Teaching Assistant for EE5110: Probability Foundations for Electrical Engineers.

Fall 2021

Teaching volunteer at Kendriya Vidyalaya (IIT Chennai) for high school science and mathematics.

2017-2018

Presentations and Talks

Learning Safe Strategies for Value Maximizing Buyers in Uniform Price Auctions

- Market Innovation Workshop (MIW), Virtual, 2025.
- INFORMS Annual Meeting, Seattle, 2024.[‡]
- Data-Driven Decision Processes Workshop, Chicago, 2024.[‡]
- Revenue Management and Pricing (RMP) Section Conference, Los Angeles, 2024.[‡]
- Manufacturing and Service Operations Management (MSOM) Conference, Minneapolis, 2024.[‡]

Skills

Languages: Fluent: English, Hindi. Native: Odia.

Programming: Python

Software & Libraries: Tensorflow, PyTorch, CVX, LATEX

Services, Reviewing and Outreach

Journals: IEEE Transactions on Automatic Control (2).

Organizing: MIT ORC Student Seminar Coordinator (Fall 2024, Spring 2025).

References

Prof. Negin Golrezaei

Sloan School of Management Massachusetts Institute of Technology golrezae@mit.edu

Prof. Abhishek Sinha

School of Technology and Computer Science Tata Institute of Fundamental Research abhishek.sinha@tifr.res.in

[‡] An earlier version of the work was presented under the title 'Bidding in Uniform Price Auctions for Value Maximizing Buyers'.