

# Uddalok Sarkar

Indian Statistical Institute, Kolkata

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## EDUCATION

- **Indian Statistical Institute** 2022 –  
*Ph.D., Computer Science*  
Advisors: Prof. Sourav Chakraborty, Prof. Ansuman Banerjee  
Advanced Computing and Microelectronics Unit
- **Indian Statistical Institute** 2020 – 2022  
*M.Tech., Computer Science, Percentile: 88.24%*
- **Jadavpur University** 2015 – 2019  
*B.E., Electrical Engineering, CGPA: 8.72/10*

## RESEARCH INTERESTS

Property Testing  
Verification  
Distribution Testing

## THESIS & PUBLICATIONS

- **Conference**
  1. *Testing Self Reducible Samplers* - Joint work with Rishiraj Bhattacharyya, Sourav Chakraborty, Yash Pote, Sayantan Sen. (Accepted in Annual AAAI Conference on Artificial Intelligence (AAAI) (2024))
  2. *Testing of Horn Samplers* - Joint work with Ansuman Banerjee, Shayak Chakraborty, Sourav Chakraborty, Kuldeep S. Meel, Sayantan Sen. (Accepted in Artificial Intelligence and Statistics (AISTATS) (2023))
- **Thesis**
  1. Masters Thesis: *On Testing of Horn Samplers*, Indian Statistical Institute, 2022.

## AWARDS & HONOURS

- Received *Google PhD Fellowship Award* (2023).
- Received *Gold Medal for outstanding performance in M.Tech (CS) Programme* (2020-22) from Indian Statistical Institute, Kolkata.

## TEACHING EXPERIENCE

- Indian Statistical Institute**
  - Probability and Stochastic Processes 2023
  - Computing Laboratory (Teaching assistant) 2022-23
  - Specification and Verification of Programs (Teaching assistant) 2022
- ACM Summer School**
  - Algorithms for Data Science 2023

## REVIEWER EXPERIENCE TECHNICAL SKILLS

- Conference: CAV(2023)
- Languages & frameworks**  
Python, Tensorflow, Pytorch, Qiskit, CirQ, TensorFlow Quantum (TFQ)  
C, C++ | NuSMV | MATLAB, Simulink

## REFERENCES

**Prof. Sourav Chakraborty**  
Associate Professor, Advanced Computing and Microelectronics Unit (ACMU), Indian Statistical Institute  
mail id: sourav@isical.ac.in

**Prof. Kuldeep Meel**  
Associate Professor, Department of Computer Science, University of Toronto  
mail id: meel@cs.toronto.edu

**Prof. Ansuman Banerjee**  
Associate Professor, Advanced Computing and Microelectronics Unit (ACMU), Indian Statistical Institute  
mail id: ansuman@isical.ac.in

## PAST RESEARCH EXPERIENCE

**Digital Audio Processing Lab** Indian Institute of Technology Bombay, India

- Research Intern (May – Jul 2018)
  - Project: Structural Segmentation of Hindustani Dhrupad Vocal Concerts
  - Supervisor: Prof. Preeti Rao, Electrical Engineering Department, IIT Bombay
  - Focus: Music Information Retrieval, Audio Signal Processing.

**C.V. Raman School of Physics and Music** Jadavpur University, Kolkata, India

- Undergraduate Research Student
  - Supervisor: Dr. Dipak Ghosh, Professor Emeritus, Jadavpur University
  - Focus: Cognitive Neuroscience, Speech Signal Analysis, Music Information Retrieval.

**INTERESTS**

**Music**

I am currently studying Jazz and Progressive Rock music. I am also interested in Folk music.  
*I have recently directed music of a folk short film Pathshala - The Inception of Pursuit.*

**Photography, Filming.**