# Souptik Halder

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in SouptikH

♥ Kolkata,India

## RESEARCH EXPERIENCE

**Indian Statistical Institute** 

Kolkata

Reserch Intern

May, 2023 - August, 2023

An Automata based approach for Uniform Sampling over String Constraints

under guidance of Prof. Sourav Chakraborty

National University of Singapore

Singapore

Reserch Intern

May,2022 - July,2022

Approximate Model Counting and Sampling algorithms & their application over various domains of Quantitive Verification

under guidance of Prof. Kuldeep S. Meel

EDUCATION

**Indian Statistical Institute** 

Kolkata, India

M. Tech in Computer Science

July, 2024 - Present

Postgraduate

Jadavpur University

Kolkata, India

B.E in Computer Science and Engineering

Undergraduate

September, 2020 - July, 2024

CGPA: 8.05/10.00

RESEARCH INTERESTS

Algorithms

Formal Verification

Model Counting and Sampling

Theoretical Computer Science

TECHNICAL SKILLS

**Programming Languages** 

C, C++, Python

Tools & Softwares

Z3, NuSMV, Git, Latex

— COURSE WORK

#### Mathematics:

Probability & Stochastic Processes, Statistical Methods, Linear Algebra, Discrete Mathematics.

### Computer Science:

Specification and Verification of Programs\*, Randomized and Approximation Algorithms\*, Graph Algorithms\*, Design and Analysis of Algorithms, Data and File Structure, Theory of Computation.

\* To be completed by April 2025

## AWARDS AND ACHIEVEMENTS

- o First Runner-up in SOF International Mathematics Olympiad (School Level) in both 2014, 2013.
- o Ranked among the top 0.8% nationally in Graduate Aptitude Test in Engineering (GATE 2024).