Gautam Singh

J +91 9452710526 ■ gautam6599123@gmail.com 🛅 LinkedIn 🥠 gautamsingh6599.github.io/ 🥎 Github

Education

Indian Institute of Science, Education and Research, Kolkata

5 Year BS-MS Dual Degree Programme

R. K. Mission Vidyapith, Deoghar, Jharkhand

AISSCE

R. K. Mission Vidyapith, Deoghar, Jharkhand

AISSE

June 2027

Current CGPA: 8.6/10.00

June 2022

90.2%

96%

May 2020

Coursework

Mathematical Methods

Waves and Optics

Computational Science

Real Analysis I & II

Basic Quantum Mechanics,

Numerical Analysis

Probability I

Linear Algebra I & II

Data Structures and Algorithms

Technical Skills

Languages: Python, R, C, C++, MATLAB

Tools & Libraries: LATEX, Git, Github, Linux, SciPy, NumPy, SymPy

Honours and Awards

Reliance Foundatation Undergraduate Scholarship

Batch of 2023

O.E.F Prize for Meritorious Students

For Exceptional Academic Performance in Class XII

O.E.F Prize for Meritorious Students

For Exceptional Academic Performance in Class X

Jan 2021

Jan 2023

Research Project

Experiments on the Spanning Ratios of Convex Polygons

Project Supervisor: Prof. Pinaki Mitra, Indian Institute of Technology, Guwhathi

- Read and implemented various research papers related to Geometric Spanner Networks.
- Wrote a codebase in C++ and Make to generate random polygons and calculate their spanning ratios.
- Implemented graph algorithms like Dijkstra's algorithm and Bellman Ford to solve the single-source and the multiple-source least path problems.
- Implemented a Dynamic Programming algorithm to solve the minimum weight triangulation problem.

Experience

SlashDot: Programming Club

 $Club\ Leader$

• Building a community of 450+ science and mathematics majors in using computational techniques in their everyday

- Orchestrating workshops, designed problems, coding sessions, and events to enhance skills and encourage scientific learning.
- Conducted programming contests and made problems on the Polygon platform.

June 2023 – present

Sept. 2023 - Present

May 2024 - July 2024