



# Dhiraj

Roll No.: 222123018

M.Sc. Mathematics and Computing

Indian Institute Of Technology,

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## EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
M.Sc. Maths and Computing	Indian Institute of Technology, Guwahati	8.25 (Current)	2022-Present
B.Sc. Physical Sciences	Kirori Mal College, University of Delhi	9.43	2019-2022
Senior Secondary	Haryana Board of School Education	92%	2019
Secondary	Haryana Board of School Education	94%	2017

## PROJECTS

### • GateGuard

Aug. 2023

Team Size-2

GitHub | Website

- A user-friendly website which provides real-time monitoring of student's entry and exit across various gates in IITG campus.
- Integrated barcode scanner to seamlessly fetch student's information, thus avoiding manual data entry and resulting in better accuracy.
- Implemented robust error handling for duplicate entries and invalid data inputs, maintaining the integrity of the database and minimizing data discrepancies.
- Technologies used: HTML, CSS, ExpressJS, NodeJS, ReactJS, MongoDB

### • StudySphere

June 2023 - Aug 2023

Self Guided

GitHub | Website

- StudySphere is a fully functional ed-tech platform that enables users to create, consume, and rate educational content.
- Implemented authentication and authorization using JWT (JSON Web Tokens), thus providing a secure and reliable way to manage user credentials.
- Technologies used: ReactJS, NodeJS, ExpressJS, and MongoDB.

### • Healthcare Management System

Aug 2023 - Nov 2023

Prof. Kalpesh Kapoor, Dept. of Mathematics, IIT Guwahati, Team Size- 4

GitHub

- A Comprehensive Healthcare Platform catering to doctors, students and faculty members of IITG.
- Implemented robust authorization and authentication mechanisms.
- Technologies used: HTML, CSS, ExpressJS, ReactJS, NodeJS, MongoDB

## TECHNICAL SKILLS

- Programming:** C, C++, Python, MATLAB\*
- Web Technologies:** HTML, CSS, JavaScript, ReactJS, NodeJS, ExpressJS
- ML Frameworks:** Pandas, Numpy, Matplotlib
- Database Management:** MySQL, MongoDB
- Miscellaneous:** Wolfram Mathematica, LaTeX, Git, GitHub

\* Elementary proficiency

## ACHIEVEMENTS

- Geeks-for-Geeks : Best Rank 96 among approx. 4000 students in the institute.
- IIT JAM-2022: Secured AIR-27 among approx 13000 candidates in IIT JAM examination.
- TIFR-2022: Cleared TIFR Mathematics written examination.

## KEY COURSES TAKEN

- Computer Science:** Data Structures & Algorithms, Database Management Systems, Theory of Computation, Object Oriented Programming
- Mathematics:** Algebra, Discrete Mathematics, Differential Equations, Probability Theory, Optimization Techniques, Numerical Analysis, Mathematical Finance

## EXTRACURRICULARS

- Saathi Counselling Club, IITG:** Mentoring freshmen under Peer Mentorship Program.
- R-software course:** Attended a 7-days R-software course by IIT Bombay.
- DasKavay:** I write Hindi poems on different social issues on my blog DasKavay