EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2025	5 YRS M.SC	IIT Kharagpur	6.75 / 10
2020	Class XII (HSC)	Samarth College of Science	77%
2017	Class X (SSC)	Satpuda Convent of Schollars	80%

PROJECTS

Nand2Tetris - a HACK computer built on a 16-bit architecture (course project) | Compiler + Tetris   [Feb '23 - Apr '23]

• Designed and constructed an adder chip and ALU that handles various arithmetic and logical operations.
• Implemented a D Flip Flop circuit, which enables storing state within a chip in synchronous digital systems.
• Developed a Hack assembler that translates Hack Assembly Language into Hack Binary Machine Language.
• Implemented a compiler to translate a high-level Jack programming language into Virtual Machine language.
• Developed a set of operating system classes specifically designed to work with the Hack/Jack platform.

Lireddit - a full-stack Reddit clone (self project) | PERN + GraphQL   [Apr '23 - Present]

• Used ReactJS for Frontend framework, Apollo Client as State management library to manage data with GraphQL.
• Utilized TypeScript and used MikroORM to set up type-safe Object-Relational Mapping in Node.js environment.
• Implemented Apollo Server to build self-documenting GraphQL API server for data retrieval and mutation.
• Used PostgreSQL, a robust and scalable database, to store document-based data.
• Utilized Docker to containerize the backend of the application, Deployed the Dockerized backend on AWS Lightsail.

Flash_Chat - a modern messaging app (self project) | Flutter + Firebase   [Feb '22 - Apr '22]

• Integrated Firebase into Flutter project to leverage Firebase's services and features.
• Utilized Firebase Authentication to implement user registration and sign-in functionality.
• Used Flutter Hero widget and animation controller to create smooth transitions and to orchestrate animations.
• Integrated Firebase Cloud Firestore, a NoSQL databaseto store and retrieve data within app.

COMPETITION/CONFERENCE

- Created a trading bot that sells and buys stocks based on **RSI** value and Bollinger Band. **- Algoswarn Hackathon**
- Created a movie recommendation system in the winter hackathon held by Algozenith. **- Algozenith Hackathon**
- Implemented and deployed a robust search engine using TF-IDF algorithm to rank coding questions.
  Scraped more than **2400** LeetCode problems using Selenium WebDriver in Python. **- Algozenith Hackathon**
- Cleared Kharagpur Winter of Code **(KWoC)**, an open-source program held at IIT KGP. Github: **anup-chandak**

AWARDS AND ACHIEVEMENTS

• Secured **98.84** Percentile in JEE Mains 2020 with a rank of **13049** out of **1.05** million candidates.
• Secured a rank of **12364** in JEE Advance 2020 out of **0.1** million candidates.

CERTIFICATIONS

Stanford Specializations: Probabilistic Graphical Models | Machine Learning | Deep Learning
AWS Specializations: Building NoSQL Database - Driven Applications | Containerized Applications on AWS
Application Development with Node on AWS | Application Development with Python on AWS
Coursera Specializations: The Bits and Bytes of Computer Networking | Software Architecture | Design Patterns
Algozenith: AZ-201 : Applied Algorithms &Data Structures -16 weeks Live Training

COURSEWORK INFORMATION

PROGAMMING AND DATA STRUCTURES | ADVANCED CALCULUS | LINEAR ALGEBRA | PROBABILITY AND STATISTICS
| ARTIFICIAL INTELLIGENCE: FOUNDATIONS AND APPLICATIONS | THEORY OF OPERATING SYSTEMS

SKILLS AND EXPERTISE

Intermediate In: HTML, CSS, JavaScript, Typescript, PostgreSQL, React, Node, Express, Flutter/Dart, C/C++
Familiar With: AWS, Docker, Graphql, RestAPIs, Python, Firebase, AdobeXD, i3, vim, Arch Linux

POSITIONS OF RESPONSIBILITY

Public Relation Head | Rajasthan Cultural Association | IIT Kharagpur

• Organised various events like Food Fest, Cultural Night and boosted social media handles to **8.5K+** followers.
• Tutored **13** rural students as part of the Educational Drive initiative during COVID while schools were closed.

EXTRA CURRICULAR ACTIVITIES

• Part of Gold winning Football and Choreography Team of Rajendra Prasad Hall of Residence in the General Championship.
• Part of the Inter-Hall short film-making crew. Hobbies - playing chess, guitar, competitive programming