

BIOTECHNOLOGY & BIOCHEM. ENGG. (M.Tech Dual 5Y)
MINOR in COMPUTER SCIENCE & ENGG. (B.Tech 4Y)

EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2025	M.TECH Dual Degree 5Y	IIT Kharagpur	8.66 / 10
2019	CBSE (XII)	KhelGaon Public School, Prayagraj	93%
2017	CBSE (X)	KhelGaon Public School, Prayagraj	10 / 10

AWARDS AND ACHIEVEMENTS

- Accomplished maximum **codeforces rating 1518 (Specialist)** and a **GFG Institute Rank- 2** for solving **700+ DSA** problems.
- Among the **top 1%** students in **Jee Mains 2020** out of **1.2 Million+ candidates** appeared in examination all over India
- Among the **top 10%** students in **Jee Advanced 2020** out of **0.2 Million+ candidates** appeared in examination all over India

SKILLS AND EXPERTISE

- Languages:** *Elementary:* Java *Intermediate:* Html, CSS, Javascript *Proficient:* C/C++, Python
- Frameworks :** Django, Bootstrap, Node.JS, Express.JS, React Native
- Libraries :** OpenCV, Redux, React.JS, Node.JS, Express.JS, Numpy, Pandas, Matplotlib, Scikit, Seaborn
- Software:** Microsoft PowerPoint, Word, Excel, Adobe Photoshop, VS Code, Google Colab, Postman, Android Studio
- OS and Others:** Linux, Windows, GitBash, GitHub, MySQL, MongoDB, PostgreSQL, Firebase, REST APIs, Context APIs

PROJECTS

- Diabetes Prediction | Machine Learning | Course Project** Aug'22 - Sept'22
Machine Learning and its Application in Biological Science Project under Prof. Amit Ghosh (IIT Kharagpur)
- Developed a machine learning model to predict the **likelihood of diabetes** in person based on **various health parameters**
 - Performed **data preprocessing** and **exploratory data analysis** to identify **patterns, correlations** and **important features**
 - Utilized Classification Algorithms like **Logistic Regression, SVM, KNN, Random Forest, Decision Tree** and **Gradient Boost**
 - Improved model performance** using techniques like **feature selection, K-fold cross validation** and **Hyperparameter tuning**
 - Evaluated** the model's performance by accuracy, precision, recall, F1 score, AUC-ROC and achieved **accuracy upto 90.76%**
- Chatty | Realtime Chat Web Application | Self Project** Nov'22 - Feb'23
- Created a **scalable** Realtime Chat Web App using **MERN stack**, enabling the users to engage in **real time conversations**
 - Implemented **bi-directional** communication using **Socket.IO**, backend API using **Node.js & Express.js** to handle messaging
 - Designed a **responsive User Interface** using **React.js**, integrated **MongoDB** as **database** to store user's data and messages
 - Implemented **secure authentication** using **jwt, bcrypt** and **improved** app performance by **pagination** and **code splitting**
- SmartEye | Face recognition Attendance Software | Self Project** Jul'22 - Oct'22
- Developed a **Face Attendance software** using Python and Tkinter, for **efficient attendance tracking** of students in **real-time**
 - Utilized **OpenCV** library and **LBPH** Algorithm for **accurate** face detection and recognition and achieved **accuracy upto 81%**
 - Designed a **desktop GUI** using Tkinter, **added features** to register, update, import & export **excel/csv attendance records**
- Portfolio | Django Web Application | Self Project** May'22 - Jun'22
- Developed a **dynamic** Portfolio Web App using **Django framework**, to showcase projects, skills and professional experiences
 - Utilized Django's **MVT architecture** to build secure app, designed a responsive user interface using HTML, CSS and Bootstrap
 - Integrated a **relational database SQLite3** with **Django's Object-Relational Mapping** to store and manage the portfolio data
- MyMall | React Native Mobile Application | Self Project** Dec'21 - Mar'22
- Built a **cross-platform** eCommerce mobile application using **React Native framework** for both the **Android** and **iOS** users
 - Used **AsyncStorage API** to store data related user authentication, profile, cart, orders, address and wishlist items offline
 - Integrated **Redux** library to **manage global state**, enabling **efficient** data flow and **synchronization** between components
 - Optimized performance using techniques like **image optimization & useMemo**, also integrated **Razorpay** Payment gateway

COURSEWORK INFORMATION

Programming and Data Structures (Theory+Lab) | Machine Learning and its Application in Biological Science | Probability and Statistics | Linear Algebra | Advanced Calculus | Derivatives & Risk Management | Intro. to Innovation & Entrepreneurship

POSITIONS OF RESPONSIBILITY

- Secretary Weightlifting | MMM Hall of Residence** Sept'21 - Apr'22
- Managed** to successfully conduct **daily training** and **trials** for **2000+** boarders of MMM hall of residence in **inter-hall sports**
 - Guided** a **team of 20 boarders** how to clean and jerk and snatch during their daily practice at the MMM Hall's gymnasium

EXTRA CURRICULAR ACTIVITIES

- Won **Amazon Prime Subscription prize** in **Website Hackathon** for designing **Hall website** using **HTML, CSS, JavaScript**
- Unit Leader** of **National Social Scheme** Unit 11 **successfully led Swachh Bharat Abhiyaan** conducted at IIT Kharagpur
- Member of **Illumination team** of MMM Hall of Residence and **secured 2nd position among 20+ halls** at IIT Kharagpur 2022