# Pranjal Sharma

Third Year Undergraduate | Department of Biological Sciences and Bioengineering

pranjals20@iitk.ac.in | \(\mathbf{\schu}\) +91-7974627141 \(\mathbf{\su}\) https://github.com/pranjalsharma-838 | in pranjalsharma-838

## **Academic Qualifications**

Year	${f Degree/Certificate}$	Institute	CPI/%
2020-Present	B.Tech in Biological Sciences and	Indian Institute of Technology Kanpur	7.77/10
	Bioengineering		
2020	Class XII (CBSE)	Sanskar Public School, Gwalior	94%
2018	Class X (CBSE)	St. Paul's School, Gwalior	89%

## Achievements

- Secured an All India Rank of 7041 in JEE (Advanced-2020) examination among 150k candidates
- Ranked 12931 out of 1.2 million candidates in JEE (Main-2020) examination

## Professional Experience and Key Projects

## Amazon-Clone | Self-Project

https://github.com/pranjalsharma-838/amazon-fullclone

- Cloned an e-commerce website using Node.js, Express.js, firebase and Stripe in the backend
- Used React.js and Material Ui to develop the front end part
- Implemented user authentication using **firebase** and used **firestore** that served as a database to store the order history of user
- Used React Context Api to store order list of user and implemented Stripe for the payment process
- Deployed the frontend of web app on netlify and backend on heroku cloud service

## Hand Gesture Recognition System | Self-Project https://github.com/pranjalsharma-838/Hand-Gesture-Recognition-System

- Developed a Machine Learning (SVM) based hand movement recognition system
- Implemented the SVM in **OpenCV** to map 5 different hand movements to keyboard actions
- Deciphered and debugged the code to further increase functionality by 10 percent and resolved all terminal-related conflicts

## Ropeway Trolley | 3D Model

(Prof. Shashank Shekhar | Aug'21-Nov'21 )

- Course Project for TA201A- Manufacturing Processes I
- Ideated, conceptualized and designed a working model of a Ropeway Trolley using manufacturing processes like casting, cutting, riveting and adhesive joining
- Designed 3D model of the prototype using softwares such as AutoCAD and Fusion 360

### Teaching | Cambridge School

- Utilised the semester break by delivering in-person lectures in Mathematics and Physics to students appearing for class 10th and 12th CBSE Board Exams.
- Developed soft-skills like communication, leadership, team-work and punctuality

## **Technical Skills**

- Programming: C, C++, Python, HTML, CSS, Javascript
- Frameworks and Libraries: React, Express, Numpy, Pandas, Scikit-learn
- Utilities: Git/Github, Visual Studio Code, Canva, LATEX
- Mechanical: AutoCAD Fusion, MS Office, Micro-Cap

## Relevant Courses

Priciples of biotechnology	Biochemical engineering	
Biochemistry	Organ System, Physiology and Anatomy	
Fundamentals of Computing	Introduction to Electronics	
Probability and Statistics	Linear algebra and Differential Equations	
Multivariable Calculus	Fluid Mechanics	
100 Days of Code: Python Bootcamp (Udemy)	Data Structure and Algorithms using C and C++ (Udemy)	

## **Extra-Curricular Activities**

#### Sports

- Currently a part of Athletics team of IIT Kanpur
- Bagged a Bronze medal for the team in Udghosh 2021, Overall Gold

## Managerial:

• SENIOR EXECUTIVE - Udghosh

Worked with the marketing team of Udghosh; India's biggest sports carnival Also worked as POC (Person of contact) for participating teams

• SECRETARY - Raktarpan

Conducting exciting awareness sessions among campus community for upcoming blood donation camps and spreading awareness about the need for a better impact

Contributing help to the needful by contacting interested live donors from the campus during emergency cases

Assisting in the organisation of blood donation camps which typically collect 200 units of blood