

Aman Kumar

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EDUCATION

Indraprastha Institute of Information Technology, Delhi (IIITD)

B.Tech Computer Science and Applied Maths

Dec 2020 — May 2024

CGPA - 8.34 (till 6th sem)

- Part of Development team at prestigious clubs like **Google DSC** and **E-cell**
- Taught 100+ students web development
- Helped in maintenance and development of projects

EXPERIENCE

Industrial

1. Full Stack Intern, MyWanderLust.in

May 2022 — Nov 2022

- Bir, Himachal Pradesh

- Built **recommender system** for suggesting product purchase.
- Made **Check in System** for hotels
- Worked on building WhatsApp based **Product Management System**
- Implemented **redesign of tour packages**.

Research

2. Optimization of Tail Latency in Edge Computing using RL

Jan 2023 — Present

- Network Security Lab, IIITD

Guide: Dr. Arani Bhattacharya

- Built a Simulation of **Network** and **Parallel Processing** compute device
- Studied the **change in computation time** in **parallel processing**.
- Built a **Dataset** by collecting data from a **real network**.
- Proposed Reinforcement Learning **solution that outperforms baseline** approaches.

3. Image and Video Segmentation based Rural Road Quality Inspection

Aug 2023 — Present,

- VISION Lab, IIITD

Guide: Dr. Saket Anand

- In collaboration with **Roadways Ministry of India**
- **Annotation** of several factors to build **dataset**
- **Training ML models** on this dataset for quality inspection

PROJECTS

Context sensitive Movie Recommender System

Guide: Dr. Rajiv Ratn Shah

- Built a system that **recommends movies** having similar **context** to **user query**.
- Information Retrieval Techniques - **TF IDF**, **Inverted Index**, **Phrase Query**.
- Recommender model uses **Cosine similarity**
- **Spell correct**, multiple user mode, **user history**, **user feedback**
- Built **dataset from scratch** using IMDB.py

IRCTC Train Reservation Portal

Guide: Dr. Mukesh Mohania

- Built back-end on **flask**, front-end on **React**
- **ER diagram** showing relationship between **Entities**
- Integrated with **MySQL** server for **Database**
- Implemented Database feature like **views**, **grants**, **triggers**, **indexing**

Instant Vital Checkup (IVC)

- **Automate** the process of find out weight, height, BMI, age and **other vitals** so that time is saved while creating profile of patient.
- Used **Computer Vision** and **Machine learning** to find out the vitals
- Used **Django** for Backend and **HTML**, **CSS**, **Bootstrap** for front-end

WhalesBook

- Front-end development for WhalesBook, a **Crypto based Social Media App**.
- Created many **cross-compatible** front-end components and screens using **React Native** and **Expo CLI**.

ACHIEVEMENTS

- **Specialist** on **Codeforces** Max. **1424** (Amongst top 15% coders)
- **Google Hash Code 2022** India rank **1180**, International rank **2864** out of 10,000+ teams
- **NASA Goddard Technology Award** Global Finalist - Conrad Spirit of Innovation Challenge (one out of 3 teams from India)
- **JSTSE Delhi Government Scholar**.
- Received rank 10,201 in Jee Mains and 6297 in Jee Advance (**top 1%**).

SKILLS

Data Structures and Algorithms, Machine Learning, Object Oriented Programming, Computer Networks, Database Management, Operating Systems, Full Stack Development, C, C++, Python, Django, React, Next JS, HTML, CSS, MySQL, MERN Stack, Flask, Javascript, R, Git, Github, Java

HOBBIES

- Youtube Content Creation,
- Competitive Programming,
- Badminton,
- Playing Guitar,
- Watching Tech Blogs and Vlogs

SOCIALS

