

Amandeep Singh

singh2004aman@gmail.com | +91 7657887757

EDUCATION

CHANDIGARH UNIVERSITY

B.E in Computer Science

August 2023 - June 2027

Mohali, Punjab

Cumulative GPA: 8.58 / 10.0

NATIONAL DEFENCE ACADEMY

Indian Army Officer Cadet

December 2022 - June 2023

Khadakwasla, Pune

LINKS

Github: github.com/singh-aman23

LeetCode: leetcode.com/singh-aman23

LinkedIn: linkedin.com/in/singh-aman23

CERTIFICATIONS

- Microsoft Azure Data Fundamentals (DP-900) – Score 895/1000
- AI for Entrepreneurship – Intel India
- Data Visualization with Python – IBM (Coursera)

SKILLS

PROGRAMMING

Programming Languages:

Java, JavaScript, C/C++, Python

Web Technologies :

HTML, CSS, React.js, Next.js, Node.js,

Express.js, RESTful APIs

Databases:

MongoDB, MySQL

Machine Learning and Data:

scikit-learn, pandas, NumPy, Regression Models

Tools:

Git, GitHub, Postman, JWT, CI/CD (Vercel), Streamlit

COURSEWORK

Data Structures and Algorithms

Object-Oriented Programming

Operating Systems

Database Management Systems

Computer Networks

Machine Learning

PROFESSIONAL SUMMARY

Computer Science undergraduate with a disciplined mindset shaped by experience as an NDA cadet. Passionate about competitive programming, data structures, and algorithmic thinking, with consistent participation on platforms like Codeforces and LeetCode. Skilled in problem-solving, full-stack development, and building efficient solutions. Brings a team-oriented mindset and resilience to both collaborative engineering projects and high-pressure coding challenges.

PROJECTS

CPREDICT | PYTHON, STREAMLIT, SCIKIT-LEARN, PANDAS, JOBLIB

AI-based web app that predicts Codeforces rating change using real contest data and ML regression

Live Demo | Github

- Developed an **AI-powered web app** that predicts Codeforces rating changes with **84.3% R² score**.
- Collected and processed data from **700+ contests**, analyzing over **30,000 user rating** records via Codeforces **public REST API**.
- Trained a **Random Forest Regressor** with **MAE ≈ 20.28** and **RMSE ≈ 29.82**, ensuring low prediction error.
- Deployed using **Streamlit Cloud** with **<100ms model response time** and **>99.9% uptime**.
- Demonstrated a complete **machine learning pipeline**: data scraping, feature engineering, model training, evaluation, and deployment.

RENTBUDY | REACT.JS, NEXT.JS (API ROUTES), MONGODB, VERCEL

Roommate-finding platform with real-time listings and authentication features.

Live Demo | Github

- Built a **full-stack roommate-finder platform** allowing users to post listings and connect with potential roommates in real time.
- Designed a **responsive UI** with React.js, optimized for both mobile and desktop devices.
- Implemented **JWT-based authentication** with secure route handling and session management.
- Developed a **RESTful API** using **Next.js** and **MongoDB** for backend logic and data persistence.
- Deployed using **Vercel CI/CD**, achieving **99.9% uptime** and **<100ms average response time**.
- Used by over **50+ test users**, with architecture designed to scale for **1,000+ concurrent users**.

ACHIEVEMENTS

- Scored **895/1000** in Microsoft Certified: Azure Data Fundamentals (DP-900) Exam
- Secured **All India Rank 75** in NDA-I (2022), qualified through UPSC and Services Selection Board
- **Top 65 out of 600+ teams** at Tekathon 3.0 – Smart India Hackathon qualifier