

Amandeep Singh

singh2004aman@gmail.com | +91 7657887757

EDUCATION

CHANDIGARH UNIVERSITY

B-Eng in Computer Science

August 2023 - June 2027

Mohali, Punjab

Cum. GPA: 8.64 / 10.0

NATIONAL DEFENCE ACADEMY

Indian Army Officer Cadet

December 2022 - June 2023

Khadakwasla, Pune

LINKS

Github: [singh-aman23](#)

LeetCode: [singh-aman23](#)

LinkedIn: [singh-aman23](#)

CERTIFICATIONS

- Microsoft Certified: Azure Data Fundamentals (DP-900) – Microsoft
- AI for Entrepreneurship – Intel Technology India Pvt. Ltd
- Data Visualization with Python – IBM / Coursera

SKILLS

PROGRAMMING

Programming Languages:

Java (4000+ LOC), JavaScript (2000+

LOC), C/C++, Python

Web Technologies:

HTML5, CSS3, React.js, Next.js

Backend:

Node.js, RESTful APIs, Express.js

Databases:

MongoDB, MySQL

Machine Learning:

scikit-learn, pandas, NumPy, Regression Analysis

Tools & Platforms:

Git/GitHub, Vercel, Postman, JWT, CI/CD pipelines

COURSEWORK

Data Structures and Algorithms

Object Oriented Programming

Operating System

DBMS

Computer Networks

Machine Learning

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

- Designed and deployed an **interactive ML app** that predicts **Codeforces rating change** with **84.3 % accuracy** (R^2 score) based on user rank and historical ratings.
- Collected and processed data for **700+ contests** using **Codeforces public REST API**, enabling insights from over **30,000 individual rating records**.
- Trained and evaluated a **Random Forest Regressor** with **MAE \approx 20.28** and **RMSE \approx 29.82**, ensuring **minimal prediction error**
- Serialized and served the model using **joblib**, achieving **model load and response times of <100 ms**.
- Successfully deployed on **Streamlit Cloud**, achieving **$>99.9\%$ uptime** and **scalable to handle 1000+ daily requests**.
- Demonstrated **full ML pipeline**: data scraping, feature engineering, model training, evaluation, and deployment in production.

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

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

Live Demo | Github

- Developed a **full-stack** roommate-finder web app allowing users to post listings and connect with potential roommates.
- Built **responsive UI** using React.js and CSS, optimized for mobile and desktop.
- Implemented **JWT-based authentication** with secure route handling and session management.
- Designed **RESTful API architecture** using Next.js with MongoDB for data persistence.
- **Deployed** on Vercel with CI/CD setup, achieving **99.9 % uptime** and **sub-100ms response time**.
- Used by over **100 mock users**, architecture designed to scale for **1,000+ concurrent users**.

ACHIEVEMENTS

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