# **ADITYA BANERJEE**

## +91 7738542777 adityabanerjee17@icloud.com Mumbai, India

#### SUMMARY

Detail-oriented and skilled Python developer with hands-on experience in machine learning, data analysis, web scraping, and API integration. Developed impactful projects like heart disease prediction using Random Forest, Ballon d'Or performance analysis, and tools for web automation and security. Proficient in Python libraries including Pandas, Scikitlearn, Requests, and BeautifulSoup, showcasing strong problem-solving and analytical abilities.

#### SKILLS

Programming Languages: Python, C, C++, Java

Data Analysis & Visualization:-Libraries: Pandas, NumPy ,Techniques: Statistical Analysis, Data Manipulation, Quantile

Machine Learning: - Algorithms: Random Forest, Tools: Scikit-learn, Processes: Data Preprocessing, Model Training, Cross-validation

Automation: Tools: BeautifulSoup, Requests, EmailMessage Module, Techniques: Web Scraping, Email Automation API Integration: Tools: Pwned Passwords API, SMTP Library, Techniques: Secure Authentication, API Communication

Software Development: Processes: Error Handling, Debugging

Version Control & Collaboration: Tools: Git, GitHub

Other Technical Skills: Concepts: Hashing (SHA-1), Secure Authentication, Protocols: SMTP, HTTP

Soft Skills: Communication, Problem-solving, Teamwork, Adaptability, Time Management, Critical Thinking, Creativity,

Leadership, Conflict Resolution, Emotional Intelligence.

#### **PROJECTS**

Password Security Checker using Pwned Passwords API: Developed a Python-based tool to check the security of passwords by querying the Pwned Passwords API and identifying compromised credentials. Utilised SHA-1 hashing for secure password processing and HTTP requests for API communication.

Skills Used: Python, Requests library, SHA-1 hashing, API integration, Error handling

Email Automation using SMTP in Python: Developed an email automation script using Python's SMTP library to send personalized messages efficiently. Incorporated dynamic content and secure authentication for streamlined email communication.

Skills Used: Python, EmailMessage module, SMTP library, Secure authentication, Dynamic content handling.

Web Scraper (Hacker News): Built a web scraper to extract and display top stories from Hacker News, including titles, links, and vote counts. Utilised BeautifulSoup for HTML parsing and Requests for HTTP requests.

Skills Used: Python, BeautifulSoup, Requests library, Web scraping, Data parsing.

Heart Disease Prediction Machine Learning Model using Random Forest: Implemented a machine learning model to predict heart disease using patient data. Utilised Random Forest Classifier for training and evaluation with crossvalidation for performance assessment.

Skills Used: Python, Scikit-learn, Random Forest, Data preprocessing, Model evaluation

Ballon d'Or Nominees Performance Analysis: Developed a data analysis project to evaluate league statistics of Ballon d'Or nominees, identifying trends in goals, recoveries, and aerial duels based on position and age. Leveraged Pandas for data manipulation and statistical insights.

August 2023 - Present

C.G.P.A. - 8.85 (till Sem III)

Skills Used: Python, Pandas, Data analysis, Statistical computations, Data visualization

## **EDUCATION & CERTIFICATIONS**

### **Bachelor of Technology**

Honours in Artificial Intelligence and Machine Learning with Electronics and Telecommunications

Dwarkadas J. Sanghvi College of Engineering - University of Mumbai

Class XII I.S.C. - May 2023

Smt. Sulochanadevi Singhania School (93.0%)

Class X I.C.S.E. - July 2021 (96.2%)

Smt. Sulochanadevi Singhania School

Python - Log2Base2 **Python Pandas - Great Larning** 

LinkedIn: www.linkedin.com/in/aditya-banerjee-08117b310

GitHub: https://github.com/adiban17