Somsubhro Chakrabarti

Professional Summary

Computer Science undergraduate skilled in Java, Python, C++, and full-stack development, with experience in machine learning, API development, and cloud computing. Strong foundation in data structures, algorithms, and OOP, and a proven ability to build scalable, high-performance applications.

Education

• B.Tech in Computer Science Engineering — VIT Bhopal University, Madhya Pradesh CGPA: 8.07 (up to 7th semester)

Oct 2022 - Present

• Class X (West Bengal State Board) — St. Lawrence High School, Kolkata Percentage: 80.14%

2020

• Class XII (West Bengal State Board) — St. Lawrence High School, Kolkata Percentage: 70%

2022

Technical Skills

Languages: Java, Python, C, C++ Web: HTML, CSS, JavaScript, React Databases: MySQL, MongoDB

Tools: Git, GitHub, VS Code, Linux, AWS

Core: Data Structures & Algorithms, OOP, Machine Learning, API Development, RESTful Services

Projects

Tesla Stock Market Prediction (Machine Learning)

- Built a predictive model using Python, Pandas, Scikit-learn, XGBoost to forecast Tesla stock prices from historical datasets.
- Applied feature engineering (moving averages, volatility analysis) to improve model accuracy.
- Visualized market trends with **Matplotlib** and **Seaborn** to provide actionable investment insights.

2D Projectile Motion Simulator

- Developed an interactive simulation tool using JavaScript and HTML Canvas to visualize projectile motion.
- Enabled adjustable parameters (velocity, angle, gravity) for real-time trajectory analysis.
- Generated **real-time graphs** for enhanced physics learning.

Credit Card Fraud Detection (Machine Learning)

- Applied Random Forest and Logistic Regression algorithms to detect fraudulent transactions in anonymized datasets.
- Achieved 95% precision through hyperparameter tuning and k-fold cross-validation.
- Deployed the trained model via **Flask** for instant, web-based fraud detection.

Certifications & Achievements

- AWS Solutions Architect Associate (2025) Designed scalable cloud solutions (EC2, S3, Lambda, VPC).
- MongoDB Associate Database Administrator (2025) Performance tuning, indexing, security configuration.
- NPTEL Marketing Analytics (Elite) Applied data analytics, statistical modeling for marketing.
- NPTEL Cloud Computing (IIT Kharagpur) Cloud models, virtualization, distributed computing.
- Coursera Bits and Bytes of Networking IP addressing, DNS, networking protocols.
- Python Essentials VITYARTHI (2023) Python, OOP concepts, data handling.
- Digital Marketing Foundations (2023) SEO, content strategy, analytics tools.
- Matlab Simulink Onramp (2022) Model-based design, simulation.

Positions of Responsibility

iOS Club – Social Media Team Member — Managed content creation and engagement, boosting club's online reach by 30%.

Languages

English, Bengali, Hindi