Aviroop Mitra

aviroopmitra5@gmail.com | 7980958951 | LinkedIn

Education

❖ **Jadavpur University**
B.E. in **Computer Science & Engineering** (2021-Present)
- Average **SGPA 8.23** (Until 5th Semester)
- Successfully completed key courses: Computer Programming and Numerical Methods, Data Structures & Algorithms, Object Oriented Programming, Graph Theory & Combinatorics, Data Communication, Microprocessors & Assembly Language Programming, Computer Architecture, Database Management Systems, Compiler Design, Artificial Intelligence, Design & Analysis of algorithm
- Member of GDSC Jadavpur University

❖ **NPTEL**
- Selected Topics in Algorithms (IIT Kharagpur)
- Fundamentals of Machine Learning (IIT Madras)

❖ **XII Standard (W.B.C.H.S.E),** (Grad. 2021)
- Secured **94%** aggregate marks
- Courses: Mathematics, Physics, Chemistry, Computer Application

❖ **X Standard (W.B.B.S.E),** (Grad. 2019)
- Secured **96%** aggregate marks

Experience

- **NeurologicAI |** Role : Machine Learning Intern (Nov. 2023 – May 2024)
    1. Resume Extractor: Worked as a debugger and tester, issues resolved: incorrect identification of starting and ending date of jobs and education, low accuracy of identifying technical skills.
    2. Call-centre Forecasting model: Worked as a data analyst and engineer, built a model using statistical analysis of 20 years data with satisfactory accuracy using classical machine learning, deep learning and TimeGPT.
    3. Subnet Mining in Bittensor Network: Worked as a researcher, tinkering with Taoshi's PTN and helped senior engineers in exploiting GPUs for efficient mining.

Projects

- **Papyrus Path |** Deep recommender model
Book recommendation model trained on 242135 unique book data using **Multi-Layered Perceptron**

- **Swipe Shield |** Classification model
Handled data with high class imbalance
Built a credit card fraud detection model, with an accuracy: **0.04% false negatives**

- **Google Stock |** Time Series Forecasting model
Explored stock price patterns and seasonality (04/01/2010 – 30/12/2022)

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Developed a predictive model to forecast stock price with accuracy **97.45%**

- **C-like Compiler |** Implementation of analysis phase of a C-like Compiler
Developed a front-end of compiler, which successfully parses any correct C code and throws any syntactic and semantic error. It uses a CFG and LALR(1) parser.

- **AcademiaSQL |** Student database management system
Developed an offline student DBMS using Java Swing and JDBC. Response speed is improved to a satisfactory level and a distributed SQL server is used. To maintain reliability and integrity, some blockchain concepts has been implemented.

Technical Skills

- **Programming Languages**:
  - C, C++, Java, Python, JavaScript
- **Database:**
  - MySQL, Oracle, MongoDB
- **Tools:**
  - Git/GitHub, TensorFlow, Node.js, pip, Visual Studio Code, Amazon Sagemaker, FastAPI, OpenAI API, Docker, Java Swing

Honours & Scores

- ✓ **1st Runner** up in Perceptron, The Turing Show, organized by RKMVERI
- ✓ AIR **34** in Senior Scholar, **Jagadish Bose National Science Talent Search**
- ✓ AIR **48** in Junior Scholar, **Jagadish Bose National Science Talent Search**
- ✓ Scored **93.58%ile** in JEE ADVANCED 2021
- ✓ Scored **99.46%ile** in JEE MAINS 2021
- ✓ Ranked **108th** in the West Bengal Joint Entrance Examination 2021

Coding Profile

- ➤ Rated 1095 on CodeForces
- ➤ Rated 1478 and 100+ problems solved on LeetCode
- ➤ Rated 1685 on CodeChef
- ➤ Competitions Contributor at Kaggle