Abhijeet Kumar

Objective

Aspiring AI/ML engineer with a strong foundation in mathematics, machine learning, and deep learning. Eager to apply my knowledge to solve real-world problems, particularly in financial modeling, time series forecasting, and automation. Highly motivated to build a career in High-Frequency Trading (HFT) and leverage AI in finance.

Education

Bachelors in Data Science and Programming Indian Institute of Technology, Madras (IITM)
Currently in 2nd Year ◆ CGPA: 9.02

Relevant Coursework: Machine Learning, Deep Learning, Reinforcement Learning, Statistics, Graph Theory, Algebraic Geometry, DBMS

Achievements and Interests

- District-level cricketer; mentally tough and resilient.
- Completed a 22 km marathon, showcasing endurance and mental strength.
- Quick learner with a deep passion for machine learning, finance, and mathematical concepts.
- Philosophical and spiritual thinker, driven by curiosity and continuous learning.
- Highly motivated to pursue a career in High-Frequency Trading (HFT).
- Completed a complex project from scratch in under 20 days.

Experience

Teaching Assistant and Mentor (Statistics for Data Science)

IITM

- Under Prof. Usha Mohan
 - Assisted students with understanding statistical concepts and problem-solving.
 - Conducted tutorials and mentored students in data science.

Skills

- Programming: Python, Flask, SQL, Bash, Git
- Machine Learning: Deep Learning, Reinforcement Learning, Time Series Forecasting, Financial Modeling
- Frameworks/Tools: PyTorch, CI/CD, MLOps, Docker, Vercel
- Other: Linux, LaTeX, Graph Theory, Algebraic Geometry

Projects

Household Services Application

Flask, SQLite, Bootstrap

- Built a multi-user web app to manage household services efficiently.
- Integrated database management and user authentication.

System Threat Forecaster

Machine Learning

- Predicted system infection probabilities by analyzing telemetry data from antivirus threat reports.
- \bullet Leveraged machine learning techniques to achieve a top 10 leaderboard ranking with 70.17% accuracy.

LLM-based Automation Agent

Completed

- Developed an automation agent that accepts plain-English tasks, parses instructions, executes multistep processes leveraging an LLM, and produces verifiable outputs.
- API endpoints include:
 - POST /run?task=¡task description; Executes the given task.
 - GET /read?path=; file path; — Retrieves content of specified files.