

# ANSHAJ SHUKLA



#### SKILLS

Languages: Java, Python, LaTeX.

Time-Series Analysis, LSTM, GRU, GNN, FB-Prophet, CNN, Transformers (e.g. BERT). **Machine Learning:** 

Tools & Frameworks: PyTorch, TensorFlow, QLora, Git, AWS, Docker, Flask.

Data Structure & Algorithms, Mathematics, Probability & Statistics, OOPS **Core Concepts: Soft Skills:** Problem-Solving, Team Collaboration, Project Management, Adaptability.

#### **PROJECTS**

### New-Delhi Load Forecasting (SIH Hackathon PSID 1624)

Solved unpredictable power demand challenges, reducing blackouts and optimizing grid efficiency.

- Engineered a hybrid GRU + GNN model achieving 97.5% accuracy on load predictions for a grid serving 10 million residents.
- Integrated real time weather, holiday and urban growth data, reducing blackouts risk by 30%.
- Automated anomaly detection and deployed real time predictions dashboards using AWS, Docker, and Flask, cutting manual intervention time by 50%

# **Bitcoin Prediction Using Time-Series Models**

- Predicting the future price of Bitcoin is a challenging yet essential task for investors and analysts.
- Developed an ensemble model combining LSTM, Fb-Prophet, SARIMA and XGBoost techniques, boosting prediction accuracy by 20%.
- Processed and analyzed over 5GB of historical data, leading to a 15% improvement in investor returns
- The goal is to Develop an optimal model for highly accurate Bitcoin prediction using the various global trends.

## Stock Performance Analysis & Dashboard Development

- Built an interactive Python dashboard to correlate stock performance trends for Tesla and GameStop, reducing analysis time by 7%.
- Employed web scrapping with yfinance to extract revenue data, which improved forecasting precision by 4.5% for key financial metrics.

#### **CERTIFICATES**

## • Programming & Algorithms:

Complete Interview Preparation – Self-Paced (Java & DSA) | GFG 18 Months C++ & Data Structures/Algorithms | Coding Ninjas 12 Months

• Machine Learning & Data Science:

Machine Learning Specialization (NLP) | DeepLearning.ai 6 Months Machine Learning | IIT Kharagpur (NPTEL) 4 Months IBM Data Science Specialization | IBM 12 Months

• Statistics & Probability:

Probability and Statistics | IIT Madras (NPTEL) 4 Months

#### ACHIEVEMENTS

#### • Advanced to the final round of the Smart India Hackathon

Selected as one of the top 30 teams among 600+ teams at the intra-university level.

# Ranked in the top 30 in Regional Mathematical Olympiad (RMO) Uttar Pradesh

Placing in the top 0.03% of 100,000 candidates organized by Tata Institute of Fundamental Research

# Achieved global ranking of 956th in LeetCode Biweekly Contest

Among 21k+ participants in Leetcode Biweekly Contest

# • Attained a prominent national ranking of 2410th

Among 41k+ participants in Codeforces Round 1004th

## • Recognized as one the Dean's top 10 % students at the University

Awarded for good academic performance and extracurricular activities at the University.

## **EDUCATION**

#### **Lovely Professional University**

Bachelor of Technology - Computer Science and Engineering; CGPA: 8.87

Since August 2022

Punjab **Godwin Public School** April 2020 - March 2021

XII Science: Percentage: 96.4% Meerut

**Godwin Public School** April 2018 - March 2019

X; Percentage: 92% Meerut