# Aditya Sharma

#### EDUCATION

#### Lovely Professional University

Phagwara, Punjab

Bachelor of Technology, Computer Science, CGPA: 8.72

Aug. 2023 - Expected 2027

# PROJECTS

#### Transparent Price Discovery for Agri-Commodities | Machine Learning

Jan 2025 - Apr 2025

- Preprocessed over 270,000 rows of mandi-level agri-commodity data from Agmarknet using Python-based scraping and cleaning-pipelines.
- Engineered 15+ time-series features (lags, rolling stats, log transforms) to enhance model accuracy and capture seasonality.
- Achieved  $R^2$  score of 0.9997 with XGBoost for price prediction, outperforming LSTM and SARIMA on all key metrics.

#### **UFC Elo Monitor** | Data Analytics

Feb 2025 - Mar 2025

- Engineered an Elo-based ranking system for 2,500+ UFC fighters, dynamically tracking performance trends.
- Processed 10,000+ fight records to analyze historical data and predict match outcomes with improved accuracy.

## Real-Time Process Monitoring Dashboard | Operating Systems

Mar 2025

- Developed a Python based task manager clone with a graphical dashboard for real-time process monitoring.
- Displays CPU usage, memory consumption, and process states to help administrators manage system performance.
- Implements efficient process handling techniques to enable smooth execution and rapid issue identification.

#### CBSE Board Result Visualiser for School | Data Visualization

Oct 2022

- Utilized Python and Matplotlib Library to visualize historical board results (past 2-3 years)
- Cleaned and preprocessed raw data to ensure data accuracy and consistency
- Created insightful visualizations, including bar charts, line plots, and pie charts, to highlight trends and patterns.

#### SKILLS

**Technical Languages**: Python, C, C++, Java

Developer Tools: Git, Jupyter Notebook, Unix/Linux

Libraries/Frameworks: Pandas, NumPy, Matplotlib, Scikit-learn, Flask, BeautifulSoup4

Relevant Coursework: Data Structures & Algorithms, Database Management Systems, Object-Oriented

Programming, Software Engineering, Operating Systems

Languages: Fluent in English

### Additional Information

**Research:** Spearheaded and co-authored a research paper titled "Transparent Price Prediction and Forecasting of Agriculture Commodities using Regression Methods", accepted for publication in a Q2 journal.