WiDS 2023-24 Final Report

Key Learnings and Takeaways -

- Basics of Python (Using Python libraries like pandas, numpy, seaborn, matplotlib, etc. and handling DataFrames)
- Information about Options Pricing and the terminologies like Call Option, Put Option, and their terms, etc.
- Linear Regression and Logistic Regression models using the several libraries in Python like sklearn, statsmodels, etc. and a brief overview of other Machine Learning methods.
- The fundamental Black Scholes Equation and the assumptions made for it contrary to the real world.
- The use of MLP (1 and 2) and LSTM models in predicting the options premium prices in the future.
- A very basic idea of Monte Carlo Simulation

Varun Kulkarni (22B2121)