Hi Sir,

I am Harsh Maheshwari. I am currently in my last year of bachelors in chemical engineering. I am interested to work under your guidance on the project "Improving VIX Futures Forecasts using Machine Learning Methods"

## Experience:

I have worked as a research intern at NUS under Prof. Bryan Hooi, here the aim was developing temporal models for link prediction in graph and network. I have also worked on time series analysis involving chemical engineering data. This project aimed at predicting Concentration of gas in a dynamic setting. I have worked on sentiment analysis as a project in my machine learning course at IIT Bombay. The project aimed at detecting Hate and Offensive Speech. I was also a part of Innovation cell IIT Bombay, where I developed computer vision models for search and rescue missions on an autonomous fixed wing.

I successfully worked with professor Sarthak Gaurav under the ISURP program last year on the topic "Economics of Blockchain for supply chain "

I have interest in quantitative finance and the use of machine learning in it, hence my interest in the project. I understand how volatility and risk are related, and can appreciate the improvement that will occur with better volatility forecasts. I would love to see how machine learning and deep learning techniques can improve the situation

Hoping for a positive reply. yours sincerely
Harsh Maheshewari