Machine learning approach to forecasting of non-stationary time series

Faculty advisor: Prof. Chi-Guhn Lee

A Toronto-based food manufacturer with a complex supply chain has been struggling with predicting accurate demand forecasts. Recent progression of COVID-19 across countries has drastically driven changes in consumer needs and consuming behaviour, exacerbating short-term disruptions like panic buying and overstocking. Due to these changes, complexity in demand forecasting has increased and puts enormous strain to global supply chains across most product categories. Therefore, the manufacturer would like to develop forecasting models that improve on existing models for predicting non-stationary time series. The student needs to have good background in statistics, machine learning, and python programming.

Contact: Prof. Lee, cglee@mie.utoronto.ca