Title: Data-driven scheduling of store staff at Sport Chek

Research Area: Operations Research, Applied Machine Learning

Description: The Sport Chek / Atmosphere banners of Canadian Tire Corp. have over 200 corporately operated retail stores across Canada that vary in size and market demographics selling an assortment of footwear, athletic apparel, and sporting goods. Newly available data and the inherent complexity of the business on top of variation of customer demand makes store labour planning a challenging problem that is well suited to Machine Learning. Quality scheduling is an important element of a good employee experience and provides a stable foundation for a retail business to drive sales and operate efficiently. The objective of this research is to explore advanced forecasting and optimization techniques that could improve the quality of sales forecasts and be integrated into the weekly scheduling processes of every store.

Start and duration: Fall 2022, 1 year. Funding is available.

Interested MEng students can send a CV and recent transcripts to Professor Vahid Sarhangian: sarhangian@mie.utoronto.ca