

Optimal waiting time quotation (*New - Winter 2019*)

Faculty advisor: Prof. Chi-Guhn Lee

A Toronto-based pharmacy faces a challenging problem of estimating waiting time for a customer who just drops a prescription. If the quoted waiting time is too long, customer is likely disappointed and may not return for future service. If too short, the pharmacy will risk at not meeting the expectation when the customer comes back for a pickup. Therefore, the objective of the project is to recommend an optimal quotation for customer return time considering the number and the type of prescriptions in the queue, the number of employees working at the moment ,etc. The student will be given a large data set to implement a machine learning algorithm. The student needs good understanding of major machine learning algorithms, queueing theory, optimization with uncertainty.

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