Quentin FRUYTIER

MSc Candidate
McGILL UNIVERSITY

qfruytier@gmail.com
+1 (438) 347-5030
/in/quentin-fruytier-78525416a/

Supervisors

Abbas Khalili
Tim Hoheisel

Programming Skills

Python (PyTorch & TensorFlow)
Java
C & C++
C#
Matlab
R

Languages

Bilingual French (native) and English

Interests

Machine Learning
Statistical Learning
Data Analysis
EM Algorithm
Optimization

Education

McGill University • **Masters in Statistics & Optimization** • **4.0/4.0** GPA — expected 2023

McGill University • **Joint Honours Math & Comp. Sci.** • **3.8/4.0** GPA — June 2021

Harvard University Summer School • General Chemistry • **grade A** — Summer 2016

Work Experience

Graduate Teaching Assistant—Math 141 (Calculus 2) — Fall 2022
McGill University Department of Mathematics — *Montreal, QC*

Data Science Intern at Nectar — Summer 2021
Nectar Technologies Data Science — *Montreal, QC*

Prototyping of supervised and unsupervised machine learning models on sensor data. Documenting model development, model iterations, and benchmarking results. Writing Python scripts to automate the data exploration process. Communicating results and insights to the operations and product teams.

Software Engineer Intern at Akamai — Summer 2020
Akamai Technologies Image Manager — *Ottawa, ON*

Developed and implemented software using existing API to ensure correctness of information in production network configuration file used for deploying software to production.

Software Engineer Intern at Matrox — Summer 2019
Matrox Electronics Systems Ltd. Software Quality Assurance — *Montreal, QC*

Created, improved and fixed automated tests for a product that encodes and sends images over a network to another product that displays it, using C# in Visual Studio.

Teaching Assistant—Foundations of Programming (Python) — Fall 2019
McGill University Department of Computer Science — *Montreal, QC*

Team Mentor—Foundations of Programming (Java) — Winter 2019
McGill University Department of Computer Science — *Montreal, QC*

Personal Projects

Deep Learning for Traffic Prediction — Winter 2021
Studied variants of **Graph Neural Networks** and **Recurrent Neural Networks** to capture both the spatial and temporal dependencies of traffic data. Implemented these in **Python** with **TensorFlow** (GPU acceleration). Experimented with **METR-LA** and **QTraffic** data sets.

Geo-spatial analysis themed project • CodeJam — Fall 2018
Used clustering technique and Python to find busiest areas for taxis

Predicting Tourist Traffic at Visitor Center — Summer 2018
Gathered past 5 years visitor data to predict traffic at visitor center. Experimented with **Fully Connected Neural Networks** (2 hidden layers).

Awards

J W McConnell Scholarship — March 2017
McGill University Major Renewable Entrance Scholarship .

Tomlinson Engagement Award for Mentoring — April 2019