

SKILLS

LANGUAGES	Python, SQL, Java, C++, C, MATLAB
TECHNOLOGIES	Pandas, Scikit-learn, Numpy, Keras/TensorFlow, Pytorch, Seaborn, Scipy, Git

EXPERIENCE

Data Science Intern - Advanced Analytics Team May 2018 to Aug. 2018
Manulife/John Hancock Financial Boston, MA

- Compiled, cleaned, and analyzed data to build an unsupervised fraud detection model using **Python, Pandas, and Scikit-learn**; presented a preliminary **detection rate of 63%** to management
- Cleaned and wrangled legacy data to deploy **25 fraud identifying rules** in **SQL**, scoring **20000+** and flagging **100+ claims**
- Worked closely with clinicians to engineer features from **5 new external data sources** for current and future models

Perception Team Member Sept. 2017 to May 2018
WATonomous - Self-Driving Car Design Team Waterloo, ON

- Piloted development of a support vector machine based on an [academic paper](#) to classify stop-lines candidates
- Implemented real-time object classification using the **TensorFlow Object Detection API** and **OpenCV** in **Python**

Software Development Intern July 2017 to Aug. 2017
Sunnybrook Research Institute Toronto, ON

- Reduced time to contour MRI scans from **~5 hours to ~40 minutes** by developing automation software in **MATLAB**
- Improved MRI image segmentation accuracy by **up to 80%** through implementing modern segmentation techniques
- Designed GUI and output format to integrate application seamlessly with the existing software

Research Intern June 2016 to Aug. 2016
McMaster University Hamilton, ON

- Collected, analyzed, and presented research on photoluminescence data; recognized contributor on the [conference paper](#)
- Initiated automation of an Intun TLX-B Laser in **MATLAB** and wrote a Standard Operating Procedures manual

PROJECTS

Competitive Pokemon Analysis

- Scraped, cleaned, analyzed, and modelled competitive Pokemon data with **Scikit-learn, Pandas, and Scipy**
- Communicated findings with **20+ visualizations** in a **Jupyter Notebook** with **Seaborn (Matplotlib)**

Sofa Search

- Designed a convolutional neural network with reinforcement learning in **TensorFlow** to help users find and purchase a sofa
- Scraped data using **Beautiful Soup**, then designed and integrated model with **Flask** in **under 36 hours**

Tab Predictor - Chrome Extension

- Implemented a neural network using **Synaptic** for **JavaScript** to predict a user's desired website when they open a tab

RapChatz - Chat Bot

- Created a chatbot in a team of five that finds rap lines based on context from Facebook Messenger or Amazon Echo input
- Developed Amazon Echo Skill using **Node.JS** and **Amazon Web Services (AWS)**; won **Top Developer** and **Top AWS Hack**

EDUCATION

University of Waterloo

B. Math in Computer Science & Statistics 2021

Cumulative GPA: 4.0/4.0 - Dean's List

Online Courses

Deep Learning by Google

Machine Learning by Stanford University

Deep Learning Part 1 & 2 by Fast.AI