



Skills

Languages

› Python, C++, PL/SQL, Java EE/SE (Oracle Certified Professional), MATLAB, Racket, R

Tools/Libraries

› NumPy, Pandas, Sklearn, Git, Unix/Linux Systems, Weblogic 12c, BASH, SOAP UI, LaTeX

Work Experience

Programmer Analyst

TELUS Health

May – Aug 2018

Toronto, ON

› Deployed a secure SOAP-based web service now used by multiple insurance companies on an Oracle Weblogic 12c server using Java EE, eCclipse, Git, SQL Developer and Maven

› Wrote PL/SQL queries to convert hundreds of rows of data between several tables and two schemas

Projects

Credit Card Fraud Detection

Nov 2018 – Dec 2018

› Achieved F1 score of 0.87 after exploring and testing logistic regression, random forest, XGBoost, isolation forest and voting models against an imbalanced dataset

› Experimented with interquartile range, synthetic oversampling and random undersampling

› Employed heatmaps, precision-recall curves, T-SNE, and other data visualization techniques to communicate model design decisions

Predictive Wine Pairing

Dec 2018 – Current

› Applied multi-class logistic regression to pair dishes with wines after experimenting with different models

› Scraped a cooking site using BeautifulSoup and extracted features with NLTK for recipes and wine pairings

› Processed, cleaned, and applied word2vec to scraped text data

MindType

NeurotechUofT

Oct 2016 – Aug 2017

› Developed a mind-controlled sign language application with ~15 interdisciplinary undergraduate/graduate students

› Designed and implemented a highly modular GUI in Python using PyQt library, which gave team members a platform to train data and further build upon the project

Self Learning

Stanford Machine Learning

Coursera

Sept 2018 – Present

› Learned foundational theory and practical applications of machine learning, data mining and statistical pattern recognition

› Gained an intuition for common machine learning practices such as feature engineering and diagnosing bias-variance trade offs

CryptoPals

May 2018 – Present

› Self-studied and implemented basic cryptographic algorithms, protocols, and penetration testing techniques in Python, such as: SQL injections, man in the middle attacks, hashes and various encryption schemes

Education

University of Waterloo

Class of 2022

› **Bachelor of Mathematics (Joint Major in Combinatorics & Optimization and Statistics)**

› Relevant Courses : CS 246 Object Oriented Programming (C++), CS 136 Data Structures and Algorithms (C), CS 135 Designing Functional Programs (Racket), STAT 230 Probability, STAT 241 Statistics (R), MATH 249 Introduction to Combinatorics

› Extra Curriculars : Muay Thai, Brazilian Jiu Jitsu, Data Science Club