

William Yang

<http://williamyang.me>
wzyang@edu.uwaterloo.ca | 647.990.3253

EDUCATION

BASc IN COMPUTER ENGINEERING
Expected April 2020 | Waterloo, ON
University of Waterloo, Third Year
Honors Co-operative Program

LINKS

Github:// [WilliamY97](#)
LinkedIn:// [williamyang97](#)
HackerRank:// [WilliamY97](#)
Medium:// [@WilliamY97](#)

HACKERRANK

ALGORITHMS - 86TH PERCENTILE
WoC 30 Algorithm Contest - Bronze Medalist

COURSEWORK

UNDERGRADUATE

Algorithms and Data Structures
Operating Systems
Matlab Numerical Methods

ONLINE STUDIES

Computer Networking
Distributed Systems
Machine Learning
Deep Learning

SKILLS

PROGRAMMING

Languages:
Python • Ruby • Java • C# • JavaScript •
C++ • Matlab • Git • HTML • CSS

Web Development:

Ember.js • AngularJS • Ruby on Rails •
Flask • MongoDB • Node.js • .NET

Data Science:

Scikit-learn • Pandas • NumPy •
TensorFlow • D3.js • PySpark

Infrastructure:

Kubernetes • Docker • Ansible • Jenkins
• MySQL • PostgreSQL • Heroku • Bash

INTERESTS

Basketball • Snowboarding • Graphic Design • Board Game Design • Poker

EXPERIENCE

IBM INC. INFRASTRUCTURE ENGINEERING INTERN

September – December 2017 | Ottawa, ON | Java, Node.js, Jenkins, Docker

- Developed microservice using **Node.js & Java** and containerized it with **Docker**
- Deployed cluster of microservice, enabling **load-balancing** of requests from **Kubernetes** with automated cluster provisioning from **Ansible** playbook
- Created **Jenkins** pipeline with **Shell & Python scripts** to record **REST API** responses & generate tests, enabling consistent & updated code coverage

SHOPIFY INC. SOFTWARE ENGINEERING INTERN

January – April 2017 | Ottawa, ON | Ruby on Rails, Python, Ember.js

- Introduced position and image integration into CSV product import and export in **Ruby**, allowing **250k+ merchants** to revise products by spreadsheet
- Architected **ETL pipeline** using concepts of **MapReduce & PySpark** to provide model that polls for inventory quantity errors on over 1 billion rows of data
- Built MVP application called Influx in **Rails & Ember.js** allowing merchants to broadcast their products with social media influencers on Instagram, & Twitter

DBRS INC. SOFTWARE ENGINEERING INTERN

May – August 2016 | Toronto, ON | C#, MongoDB, AngularJS, D3.js

- Created a search tool with **D3.js**, **MongoDB**, and **C#** that turned transactions into a node graph, allowing **10k+ analysts** to interact with them visually
- Implemented customized services in **AngularJS** for asynchronous HTTP requests to **C#** controllers, accelerating data queries

WATONOMOUS SELF-DRIVING CAR TEAM SOFTWARE LEAD

June - December 2017 | Waterloo, ON | Design Team

- Built traffic stop sign detection module using **convolutional neural network** to identify objects from camera input with **TensorFlow**

PROJECTS

FINALYTICS - PORTFOLIO PLATFORM goo.gl/TBiWcc

Built with **Python**, **Flask**, & **Javascript** to perform **data visualization** & optimize portfolios with insights to stock from BlackRock, NY Times, & Yahoo Finance APIs

CATALOGIT - RECORD MANAGEMENT SYSTEM goo.gl/5p2hm8

Developed a catalog system using the **Python & Flask** framework. Authentication is provided via Google **OAuth** and all data is stored within **PostgreSQL**

SUPERVISED PARKINSONS DATA SCIENCE MODEL goo.gl/XurHJi

Trained statistical model using **SciKit-learn**, **Numpy**, and **Pandas** to diagnose patients with Parkinson's with **91.4% accuracy** - wrote a **technical report** on findings

STUDENT INTERVENTION SUPERVISED LEARNING goo.gl/qY4jJG

Developed a **Python** model that predicts likelihood that a given student will pass. I tested **Naive Bayes**, **Gradient Boosting**, and **Support Vector Machines** on the data

BIKE SHARING RENTAL NEURAL NET PREDICTION goo.gl/T98sKS

Created a **neural network** in **TensorFlow** and coordinated **EC2 Cluster** to train it on a dataset after parameter tuning to predict bike rental demand

AWARDS

2016	Top Finance & Data Visualization App	PennApps Spring - goo.gl/4y5eNe
2016	2nd Place Global Technology Hackathon	DBRS Incorporated
2015	Top Heritage Preservation iOS App	Yale Hacks Fall - goo.gl/Hmy66r