

William Yang

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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

ONLINE STUDIES

Computer Networking
Distributed Systems
Machine Learning
Deep Learning

SKILLS

PROGRAMMING

Languages:
Python • Ruby • Java • Swift • C# •
JavaScript

Web Development:

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

Data Science:

Scikit-learn • Pandas • TensorFlow •
PySpark

Infrastructure:

Shell Scripting • Docker • AWS (EC2) •
Jenkins • MySQL

INTERESTS

Basketball • Snowboarding • Table Tennis
• Board Games • Poker Studies

EXPERIENCE

IBM INC. INFRASTRUCTURE ENGINEERING INTERN

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

- Architected tool in **Node.js** for API testing of the TM1 server and containerized it with **Docker**, enabling **load-balancing** and **parallelization** of requests
- Set up delivery plan with **Bash scripts** in **Jenkins** to record **REST API** responses from builds and generate updated tests, completely automating the process

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
- Assisted in introducing **ETL pipeline** using **PySpark** to poll and detect errors in product quantities, enabling automated maintenance of inventory
- Built demo called Influx in **Rails & Ember.js** allowing merchants to broadcast their products with social media influencers

DBRS INC. SOFTWARE ENGINEERING INTERN

May – September 2016 | Toronto, ON | .NET, MongoDB, AngularJS

- 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
- Built the Rating Committee and Metrics tools with **AngularJS** used by company analysts to accelerate process of financial model rating

WATONOMOUS SELF-DRIVING CAR TEAM SOFTWARE LEAD

Design Team | Waterloo, ON | Python, TensorFlow

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

PROJECTS

FINALYTICS - PORTFOLIO PLATFORM goo.gl/TBiWcc

Built with **Flask** to analyze equities on a dashboard and optimize portfolios with insights to stock pulled from BlackRock, NY Times, & Yahoo Finance APIs

CATALOGIT - RECORD MANAGEMENT SYSTEM goo.gl/5p2hm8

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

SUPERVISED PARKINSONS VOCALIZATION MODEL goo.gl/XurHJi

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

CONVOLUTIONAL NEURAL NET IMAGE CLASSIFIER goo.gl/brRk9f

Built a **convolutional neural network** in **TensorFlow** and coordinated **EC2 Cluster** to train it on the CIFAR-10 dataset - resulting in an **accuracy of 67.6%**

CUSTOMER SEGMENTATION CLUSTERING MODEL goo.gl/K7Tx4x

Used **Gaussian** mixture model clustering, and **SciKit-learn** to see if any similarities exist between businesses, and how to best classify them

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
2015	Leadership Excellence Award	Waterloo Engineering Society