William Yang

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EDUCATION

BASc in Computer Engineering
Expected April 2020 | Waterloo, ON
University of Waterloo, Third Year 3A
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
Computer Networking

ONLINE STUDIES

Distributed Systems
Machine Learning
Deep Learning

SKILLS

PROGRAMMING

Languages:
Python • Ruby • Java • C++ • C# •
JavaScript • SQL • Matlab

Front End:
Ember.js • AngularJS

Back End:
Rails • Flask • MongoDB • Node.js

Data Science:
Scikit-learn • Pandas • TensorFlow •
PySpark

Infrastructure:
Shell Scripting • Docker • AWS (EC2) •
Jenkins

INTERESTS

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

EXPERIENCE

IBM INC. Infrastructure Engineering Intern
September – December 2017 | Ottawa, ON | Bash, Node.js, Jenkins, Docker
- Architected a tool for **API testing** of the TM1 server and containerized it with **Docker**, enabling **load-balancing** and **parallelization** of incoming test requests
- Set up delivery plan with **Bash scripts** in **Jenkins** to record **REST API** responses from builds and generate updated tests with minimal intervention

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 a demo called Influx in **Rails** & **Ember.js** that allowed 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** and **C#** that turned transactions into a node graph, allowing **10k+ analysts** to view business relationships 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 Engineer
June 2017 - Present | Waterloo, ON | Python, TensorFlow
- Building traffic sign detection module with a **convolutional neural network** to identify objects from camera and LIDAR input with **TensorFlow** in **Python**

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
Build 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%**

SEQ2SEQ LANGUAGE TRANSLATION MODEL goo.gl/VpW4b3
Trained a **sequence to sequence model** with **Tensorflow** and **Numpy** on a dataset that can translate new sentences from English to French.

AWARDS

2016	Top Finance & Data Visualization App	PennApps Spring 2016
2016	2nd Place Global Technology Hackathon	DBRS Incorporated
2015	Top Heritage Preservation App	Yale Hacks Fall 2015
2015	Leadership Excellence Award	Waterloo Engineering Society