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 • C# • JavaScript

Web Development:

Ember.is • Angular JS • Ruby on Rails • Flask • MongoDB • Node.js • .NET

Data Science:

Scikit-learn • Pandas • TensorFlow • **PySpark**

Infrastructure:

Kubernetes • Docker • AWS (EC2) • Jenkins • MySQL • PostgreSQL • Heroku

INTERESTS

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

EXPERIENCE

IBM INC. INFRASTRUCTURE ENGINEERING INTERN

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

- Developed microservice in **Node.js & Java** and containerized it with **Docker**
- Deployed cluster of containerized service, enabling load-balancing & parallelization of requests with orchestration from Kubernetes
- Created **Jenkins** pipeline with **Bash & Python scripts** to record API responses from builds & generate updated tests, 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.is allowing merchants to broadcast their products with social media influencers

DBRS INC. SOFTWARE ENGINEERING INTERN

May - August 2016 | Toronto, ON | .NET, MongoDB, AngularJS

- Created a search tool with **D3.is**. **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

June - December 2017 | Waterloo, ON | Design Team

• 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 Python & Flask to analyze equities 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 **Python & 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

STUDENT INTERVENTION SUPERVISED LEARNING goo.gl/qY4iJG

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

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%

2016	Top Finance & Data Visualization App
2016	2nd Place Global Technology Hackathon
2015	Top Heritage Preservation iOS App

PennApps Spring - goo.gl/4y5eNe **DBRS** Incorporated Yale Hacks Fall - goo.gl/Hmy66r