YiFei Tang

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🎓 Education

University of Toronto, St. George Campus   Toronto, ON
BASc Computer Engineering – GPA: 3.80/4 – Dean's Honour List   *2017 – 2021*
Courses: Algorithms and Data Structures (A-), Machine Learning (A+), Operating Systems (B), Databases (A)

🌐 Experience

Amazon Web Services   Vancouver, BC
Software Development Engineer Intern   *May 2020 – Aug 2020*
> Amazon MQ Team: building a microservice using AWS Lambda, DynamoDB, React, NodeJS

National University of Singapore   Singapore
Machine Learning Research Intern   *May 2019 – July 2019*
> Developed an application with a **PyQt GUI** to classify medication from live webcam video
> Used **OpenCV** to identify pills from a screen and **K-Means** clustering with **Scikit-Learn** to extract HSV value
> Queried a **MySQL** database to insert, classify and remove pills and their corresponding information
> Additionally trained a CNN built with **TensorFlow** to recognize 6 pills, achieving **97% accuracy** on test set
> App recognized 6 stored pills with a 93% accuracy under good lighting, and 68% under poor lighting

⚗ Projects

CineYet - Android App   Java, Firebase, Android Studio
> Built a social media app for cinephiles, allowing users to review movies and recommend them to friends
> **NoSQL** database and authentication hosted on **Firebase**, movie data retrieved from **IMDB API**, user interface built with **Android Studio**

Onion GIS Map Application   C++, GTK, Libcurl, Git
> Implemented **Dijkstra's** algorithm to find path between intersections, optimized run time by 50%
> Displayed live weather data using Dark Sky API, retrieving information with Libcurl **web scraper**

🏆 Hackathons

Finalist and Best Fashion Hack - UofTHacks 2020   Python, AWS, Heroku, MySQL
> Created a website customizing environmentally friendly outfits for a user based on photos of their clothing
> Deployed a Flask server on **Heroku** to receive user input, applied Google's **Cloud Vision API** to analyze the data, retrieved outfit combinations from a **MySQL** database hosted on **AWS**

2nd Place - RBC AmpHacks 2019   Python, jQuery, Flask, AJAX, Bootstrap
> Built a platform to plan Income Share Agreements - a theoretical alternative to student loans offered by RBC
> Used **jQuery** and **AJAX** to send user profile information to the Flask server, analyzing student data with a KNN

Winner - Hack The North 2019 - TD API Challenge   Python, Flask, Azure OCR, MySQL
> Built an app providing students with financial and environmental advice about their grocery decisions
> Used **Azure** OCR to analyze receipt data, **Flask** build the **REST API**, **MySQL** to store user data

⚙ Skills

Languages: Python, Java, C, C++, SQL, HTML, CSS, JavaScript, MATLAB
Technologies: AWS, Firebase, Android SDK, Flask, ReactJS, Qt, TensorFlow, OpenCV, Numpy, Matplotlib