

# Tate Cheng

✉ [tl2cheng@edu.uwaterloo.ca](mailto:tl2cheng@edu.uwaterloo.ca) 🌐 [tate1010.github.io](https://tate1010.github.io) ☎ 647-402-6181 in [tate-cheng](#) 🔄 [tate1010](#)

## + Skills

---

**TECHNICAL:** Python, C++, Java, C, OOP, Tensorflow, Keras, Flask

**DEVOPS:** Agile, Jira, BitBucket, Bamboo, Artifactory, Confluence, Ansible, Git, Docker

**SPOKEN LANGUAGES:** English, Cantonese, Mandarin

## + Employment

---

### DevOps Engineer co-op

Bank of Montreal Financial Group

Toronto, Ontario

Sept. 2018 to Current

- Develop and manage **Ansible Playbook** to perform software configuration management between Enterprise Wire Payment Developer and QA's environment
- Create a visual tracker to visualize fixed and ongoing vulnerability issue using data from **ELK stack**

### Data Analyst Student Intern

Royal Bank of Canada

Toronto, Ontario

May 2018 to Aug. 2018

- Developed an automated test suite to verify correctness and presence of analytics data from RBC mobile app using **Python Pandas, Android Studio, Google Analytics, and BigQuery**
- Utilized the analytics test automation suite to find analytics errors for the upcoming 2.0 release of the mobile app
- Assisted in repairing a fingerprint authentication issue on the mobile app

### Machine Learning Research Assistant

Epiphany Asset Management (HK) Limited

Central, Hong Kong

May 2017 to July 2017

- Compared different machine learning algorithm models' performance and determined which model is more suitable for usage by building and developing deep-learning neural-networks such as **LSTM, gradient boosting regression, and hybrid ARIMA** using HSI's data within Python, utilizing **Pandas, NumPy, Keras** and **Sci-Kit Learn**
- Reconstructed daily stock market returns from monthly returns using compressed sensing and other machine learning algorithms
- Compared the correlation between different hyperparameters on a model by performing hyperparameter optimization using grid search on different neural network models

## + Education

---

### 3A - University of Waterloo

Candidate For Bachelor of Computer Science 2020

## + Hackathons

---

#### RUHacks2018

- **Best Green(Money) Hack**
- Built Cocoa, a proactive budget financial app that notifies you prior to making purchases at checkout
- Worked on the backend server with **Python, Flask**, and **Google Places API**

#### ConuHack 2018

- **First Place** API Challenger Winner and Hackathon Overall **Third Place** Winner
- Built Awesome sport, an automatically soccer game highlighter using **Data Analytics** and **Machine Learning**.
- Worked on extracting data using the **Astuce media API** in the backend server

## + Projects

---

#### QuadRis

- Built the retro game Tetris featuring custom-made rules and level using C++ and OOP
- Implemented a prefix trie and completed an interpreter that allows the user to shorten or repeat sequence of commands with ease

#### Party Web Service

- Used **React, Material UI, Redux**, and **Node.Js** and built a web-based party game engine
- Focused on developing user experience