TATE CHENG
SOFTWARE DEVELOPER

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tate-cheng tate1010

SKILLS//

Programming	Turing, Bash, Git, C, Racket, JavaScript, HTML, C++, R, Python, Java
Spoken Languages	English, Mandarin, Cantonese
Data Analytics	Pandas, MatPlotLib, SVD, PCA, ICA, PyPlot
Machine Learning	XGBoost, Gradient Boosting, CNN, RNN, LSTM, PyTorch, Keras, TensorFlow

EXPERIENCE//

Machine Learning Research Assistant May 2017 - July 2017
Epiphany Asset Management (HK) Limited
Central, HongKong

•Used keras, tensorflow and sklearn. Built and develop deep-learning neural-network such as LSTM, Gradient boosting regression or hybrid ARIMA
•Implemented compressed sensing and machine learning algorithm to construct daily returns of HSI from monthly data, and studied the properties of the reconstructed time series with the original one
•Perform hyper-parameter optimization on neural network using grid search and compared their performances

Computer Science Tutor September 2015 - September 2017
Waterloo, ON

• Worked with first year students enrolled in CS135 and CS136 at the University of Waterloo
• Helped prepare University of Waterloo's students for midterms, averaging a grade of 89% by creating sample questions .
• Conducted one-on-one lecture Tutoring and provide student with problem solving technique.

Computer Technician September 2015 - January 2016
Mac&PC Repair Depot
Markham ON

• Used analytical skills and knowledge of computers to determine issues and find appropriate, technical solutions
• Installed, upgrade and troubleshoot issues for software and hardware at user request
• Repaired liquid-damaged, broken screen, and bricked Macbook.

PROJECTS//

QuadRis
• Used C++ and OOP. Built the retro game Tetris, featuring custom-made rules and level.
• Using a prefix trie. Completed an interpreter that allows the user to shorten or repeat sequence of command in ease.
• OOP allows easy access to add additional feature. Such as adding new pieces, command or level.

Party Web Service
June 2016 - August 2016
• Used React, Material UI, Redux, and Node.Js and built a web-based party game engine
• Focused on developing user experience
• Unique feature designed to promote physical interaction between players
• https://party-web-service.herokuapp.com

HACKATHON//

ConuHack 2018 Condordia University Hackathon 2018
• First Place API Challenger Winner and Hackathon Overall Third Place Winner
• Built awesome sport. An automatically soccer game highlighter using Data Analytic and Machine Learning.
• Worked on extracting data using the Astucemedia API as well as backend

YHack 2017 Yale University Hackathon 2017
•Built Emotionji, a conversation analysis that is able to show the emotion between the two people at the time of speech.
•Used Google cloud speech, IBM Watson, and Iconic Machine Learning API.
•Worked on the backend and built a complete public API that anyone can use. Hosted and deploys on Heroku

MSFT Hack 2017 Microsoft Hackathon 2017
•Built FoodMe using Microsoft Azure Machine Learning
• Calculate food nutritional value by taking a picture of food

EDUCATION//

2B - University of Waterloo
Candidate For Bachelor of Computer Science 2020

AWARDS//

January 2018 ConuHacks
Overall Third Place, ConUHacks

January 2018 Astucemedia
First Place, Astucemedia: Data Platform API Challenge at ConuHacks

August 2016
University of Waterloo President's Scholarship

April 2016
University of Waterloo Faculty of Math Euclid Contest Scholarship

October 2015
Canadian Senior Mathematics Contest Distinction (top 25%)