Martin Woo

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EDUCATION

QUEEN'S UNIVERSITY
MSc of Science
Computer Science
September 2022 | Kingston, ON
Cum. GPA: 4.1/4.3

QUEEN'S UNIVERSITY
BS in Computer Science
Cognitive Science
May 2020 | Kingston, ON
Cum. GPA: 3.24/4.3
Major GPA: 4.0/4.3

LINKS

Github:// **martinwoo7**
LinkedIn:// **Martin Woo**

COURSEWORK

GRADUATE
Deep Learning
Reinforcement Learning
Research Methods
Computing Beyond Turing
Cybersecurity

TEACHING ASSISTANT
Algorithms (CISC 365)
Web Development (CISC 281)
Cybersecurity (CISC 472)

SKILLS

PROGRAMMING
Over 5000 lines:
Python • JavaScript • Matlab • LaTeX
Over 1000 lines:
Java • CSS • HTML • PHP
Familiar:
Flutter/Dart • C • C++ • MYSQL

TECHNOLOGIES
Python
TensorFlow • Scikit-Learn • Electron
Gatsby • Keras • scipy • pandas
JavaScript
React • React Native

AWARDS

2020 Graduate Fellowship/Scholarship

LANGUAGES

English • Cantonese

EXPERIENCE

RESEARCH ASSISTANT | Dr. Eytan David
May 2022 - Present | Vancouver, BC | Python, React, Electron
- Working for **Dr. Eytan David** to create custom ML program for analyzing dizziness.
- Used Electron framework with React front-end + Python back-end to create a standalone desktop app for suggesting parameters used in a custom therapeutic protocol.

MASTER'S STUDENT | Queen's School of Computing
Sep 2020 - Jul 2022 | Kingston, ON | Python (TensorFlow), LaTeX
- Worked under **Dr. Farhana Zulkernine** in pursuit of Master's degree.
- Implementations involve Human Activity Recognition (HAR), stream clustering, LSTMs, AEs, CNN, and IoT processing.
- Used TensorFlow2 to produce state-of-the-art and novel research on using clustering for HAR.
- Implemented a total of 10 clustering machine learning models for time-series processing.

RESEARCH ASSISTANT | Queen's French Department
May 2020 - Sep 2020 | Kingston, ON | HTML, CSS, JS, PHP, MYSQL
- Worked under **Prof. Greg Lessard** to maintain and upgrade a web application catered towards low-end devices: **VinciLingua**.
- Currently used in multiple Queen's language courses.
- Upgraded framework to increase computational speed by ~10% and implemented a streamlined modern design (for next release).
- Integrated higher server and client-side security protocols and user account validation.

PROJECTS

(IN PROGRESS) FOOD PICKING APP
Current | Vancouver, BC | React Native, Python, Firebase
- App to help indecisive people (or partners) pick something to eat.
- Includes stat tracking + analysis, local business info, and basic learning algorithm.

QUEENSTONE CARD GAME
Sep 2017 - Dec 2017 | Kingston, ON | Java, Jira, Git
- Worked in agile group (5) to implement **QueenStone** card game via bi-weekly meetings.
- Implemented logic and card interactions + design of cards.
- Custom logic for each card and implemented logic stack for resolving conflicts between cards.

PUBLICATIONS

[1] M. Woo. 2022: A computational odyssey. towards a deeper understanding of clustering streaming human activity recognition data. Master's thesis, Queen's University, Kingston, ON, Canada, Sept. 2022.