

Ming Liang Dai

Email: mldai@uwaterloo.ca | (647) 854-9394
GitHub: <https://github.com/MingLiangDai>

LinkedIn: <http://linkedin.com/in/ming-liang-dai>
Portfolio: <https://mingliangdai.github.io/>

SKILLS

- + **Languages & Frameworks:** JavaScript, HTML, CSS, React, Bootstrap, Python, C++, C
- + **Methodologies:** Agile, Scrum, Kanban, Dynamic Software Development Method, Lean, Waterfall
- + **Soft Skills:** Communication, teamwork, leadership, hard worker, fast learner

EDUCATION

2019 – 2024

UNIVERSITY OF WATERLOO, ON, CANADA

- + Candidate for Bachelor of Applied Science – Computer Engineering
 - o President's Scholarship of Distinction (95+% admission average)

PROJECTS

Jan. 2020 – Present

INSTAGRAM BOT

- + Developed a **Python** algorithm that automatically performs data collection on user's followers list
- + Implemented **Python** list functions to organize and analyze data for mutual followings
- + Executed **JavaScript** commands to access **HTML** elements using **Selenium** and **ChromeDriver**

Jan. 2020 – Present

E-COMMERCE WEBSITE

- + Demonstrated understanding in **CSS** display configurations to accommodate for mobile devices
- + Designed appropriate layouts to maximize **user experience (UX)** and improve **user interface (UI)**
- + Incorporated menu buttons using **JavaScript** to allow navigation through categories of items

Dec. 2019 – Jan. 2020

ANIMATED CANVAS BACKGROUNDS

- + Generated interactive website backgrounds using canvas element, animation frames, and objects
- + Demonstrated thorough understanding of **UX** and **UI** design by the implementation of user input
- + Applied **OOP** principles to effectively manage canvas animations to increase website aesthetics

Nov. 2019 – Dec. 2019

STOCK PORTFOLIO PERFORMANCE ANALYZER

- + Computed the adjusted cost base and annual capital gain/loss of securities using **C++** for fast performance
- + Incorporated **linked lists** and **manual memory allocation** to effectively store data
- + Implemented **selection sort** to organize and analyze stock portfolio data for a specific time period

Apr. 2019 – May 2019

PONG, FLAPPY BIRD & ULTRASOUND PIANO

- + Effectively manipulated an **Arduino** 64-LED display by applying 2-D arrays and looping structures
- + Constructed a working **electrical circuit** which furthered understanding of electronic elements such as resistors, shift registers, potentiometer, voltage sources, etc.
- + Formed circuit linking together ultrasound sensor & speaker capable of producing 60 music notes

EXPERIENCE

Sept. 2018 – June 2019

FIRST ROBOTICS TEAM: R3P2 5834 BUSINESS TEAM MEMBER

Riverdale Collegiate Institute, Toronto ON

- + Successfully constructed drive base of robot by collaborating with members of the build team
- + Coordinated calls to **sponsors** with multiple rehearsals and well-prepared scripts completed prior
- + Developed **leadership** skills working with team members and participating in **outreach** events

Mar. 2019 - June 2019

HIGH SCHOOL MATH TUTOR

Teenage Tutor, Toronto ON

- + Raised the academic average of 5 high school students by a total of **60+%**
- + Accelerated clients' understanding of mathematical concepts through thorough explanations
- + Coordinated and organized weekly tutoring sessions with clients that satisfied both parties