

Ming Liang Dai

Contacts: 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

- + **Technical Skills:** JavaScript, Python, C++, React, Node, Django, AWS, UNIX, Git, Docker, Bootstrap
- + **Soft Skills:** Leadership, teamwork, communication, hard worker, fast learner

EXPERIENCE

Jan 2021 - Apr 2021

SOFTWARE ENGINEER

JamLabs Data Science, Toronto ON

- + Developed authentication system on **Node.js** by applying best security practices including **password hashing** and **signed tokens**, allowing users to safely establish their sessions on the company network
- + Leveraged **AWS DynamoDB's** advanced partitioning feature to build out well-structured and partitioned database models, dramatically reducing read/write run time
- + Incorporated administrative functions using **AWS Lambda** to efficiently manage databases and user accounts on a completely serverless environment
- + Integrated data processing pipeline using **AWS Lambda** to automatically trigger and provide seamless UX when users upload data to company data lake

Jun 2020 - Aug 2020

FRONTEND DEVELOPER

MEGAComfort Inc, Toronto ON

- + Redeveloped the company's dashboard portal from scratch, **significantly reducing load up time**
- + Implemented 15+ dashboard widgets using third-party libraries to **visualize dashboard data** for distributors and companies affiliated with MEGAComfort Inc.
- + Implemented resizable dashboard elements and **real-time data filtering**, allowing for **user customizability** and responsive, interactive **data visualization**
- + Led the development of a **React** camera web application using **OpenCV.js** library to reduce the need for user inputs and improve **user experience** through advanced image processing and automatic photo taking

PROJECTS

May 2020 - May 2020

TRANSACTION RECORD TRACKING APP – THE LEMONADE STAND

- + Coding challenge presented by MEGAComfort for its frontend developer position, with **50+** submissions
- + Developed with a **Django** backend and **React** frontend, using **Bootstrap** for styling
- + Employees can enter sales that they have made and their transaction report will update dynamically, able to handle multiple employees at once

Jan 2020 - Feb 2020

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**

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

EDUCATION

Sep 2019 - Apr 2024

UNIVERSITY OF WATERLOO, ON, CANADA

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

INTERESTS

- + Personal finance, stock market, cryptocurrency, video games, computer hardware