JEFF MA

Computer Engineering Student

SKILLS

Frontend

- HTML / CSS / Sass / Material UI / Bootstrap
- React / Redux
- JS / TypeScript / jQuery
- Swift

Backend

- PHP / Laravel / Next.js
- C / C++
- MySQL / Knex.js / GraphQL
- Python / Scikit-Learn
- Arduino / Verilog

General

- Responsive Web Design
- Version Control (Git, GitHub)
- Search Engine Optimization (SEO)
- Model View Controller (MVC)
- HTTP 1.1 / Web Sockets

OTHER PROJECTS

Introduction to Machine Learning [2021]
- An online course implementing models

TaDo [2020]
- A ToDo web app involving friends

Homemostasis [2019] | (github)
- An emotion neutralization app using facial recognition

CONTACT ME AT:

Phone: (647) 916-8295
Email: jeff.ma@uwaterloo.ca
LinkedIn: linkedin.com/in/jma-wloo
GitHub: github.com/jmawloo
Website: jmawloo.github.io

CAREER HISTORY

Frontend Developer | Showfloor Inc.   Jan - Mar 2021
- Optimized landing page using Next.js image compression and SEO (Search Engine Optimization), increasing page performance to 95% on all devices
- Integrated API with frontend web app using Redux, GraphQL and HTTP services, adding 3 major features related to user info and interactivity
- Refactored code to reuse React and Material UI components, removing 500+ lines of code bloat.

Web Developer | Horizon Studios Inc.   May - Sep 2020
- Built an embedded user feedback form using React, Redux, Laravel and MySQL, enabling 10+ large clients to provide feedback on content
- Styled components with SASS and Material UI for responsive design and easy accessibility, improving features such as closed captions
- Documented code, wrote wikis on coding procedures and created lessons on development processes, reducing onboarding time by around 1 week

Web Developer | Environment Canada   Sep - Dec 2019
- Designed an automated CSV data exporter (using HTML, CSS, JS, jQuery, Bootstrap, PHP and PostgreSQL), reducing time spent consolidating data into reports by 80%

iOS Developer | Startuptive Inc.   Jan - Apr 2019
- Developed a prototype using XCode, Swift and SQLite that integrates with smart appliances and helps owners register and manage their usage by customers

PROJECTS

Personal Website | (github)   Sep 2021 - present
- Currently implementing a personal website designed with Figma using Next.js

Web Developer @ Waterloop | (github)   Jan 2020 - Aug 2021
- Designed 7+ responsive components using Figma, React and TypeScript
- Programmed 5+ API endpoints using Express.js and models using Knex.js to serve a content management system

Cloud Pickup @ HackTheNorth | (devpost) | (github)   Sep 2018
- Built a litter collection AI for a virtual robot by training an unsupervised Machine Learning model using Scikit-Learn

Python Workshop @ Ryerson University | (github)   Apr - May 2018
- Created a program to process and extract the tone of tweets with Python's Natural Language Toolkit Library

Arduino Workshop @ Ryerson University | (github)   Apr - May 2018
- Constructed an Arduino mini car using an accelerometer, servo motors, and an Internet of Things (IoT) interface chip as the car's remote control

ACADEMIC BACKGROUND

University of Waterloo | GPA: 89.30 / 100   Sep 2018 - Apr 2023
- Synthesized and optimized a multiply-accumulate Verilog program to an FPGA board, pipelining matrix multiplications
- Built an electric wheelchair prototype on a NUCLEO-F401RE development board using Proteus and STM32CubeIDE
- Designed a real-time operating system with priority scheduling, interrupt handler and timer support using C and Keil uVision

Ryerson University | GPA: 4.27 / 4.33   Sep 2017 - Apr 2018