JEFF MA

3B Computer Engineering Student

jmawloo.vercel.app

SKILLS

Frontend

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

Backend

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

General

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

INTERESTS

- Artificial Intelligence (AI)
- Machine Learning
- Computer Vision
- Internet of Things
- Quantum Computing
- Hardware and Embedded Systems
- Personal Development and Growth
- Lifelong Learning

CONTACT ME AT:

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CAREER HISTORY

Frontend Developer @ Showfloor Inc.   Jan - Mar 2021

- Increased page performance to 95% on all devices by optimizing landing page using Next.js image compression and SEO (Search Engine Optimization)
- Added 3 major features related to user info and interactivity by integrating API with web app using Redux, GraphQL and HTTP services
- Removed 500+ lines of code bloat through code refactoring to reuse React and Material UI components

Web Developer @ Horizon Studios Inc.   May - Sep 2020

- Enabled 10+ large clients to provide feedback on content by building an embedded user feedback form using React, Redux, Laravel and MySQL
- Styled components with Sass and Material UI for responsive design and easy accessibility, improving features such as closed captions
- Reduced onboarding time by around 1 week by documenting code, writing wikis on coding procedures and creating lessons on development processes

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 natural language processing program to 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) Adafruit feather wifi chip connected to a 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