Ivan Mak

416-917-6836 | ivanjbmak@gmail.com | Portfolio | LinkedIn | GitHub

Skills

Programming Languages	TypeScript, JavaScript, HTML, CSS, Python, Java, C/C++, C#, MATLAB
Frameworks/Libraries	React, Redux, Node.js, Express, MongoDB, Flask, SASS, Bootstrap, SQLite, ROS
DevOps/Other	Git, Bash, Webpack, Heroku, Netlify, Unix, REST API

Projects

DevBook – Social Media Web Application   Live Site | GitHub

React, Redux, MongoDB, Express, Node.js, JavaScript, HTML, CSS, Bootstrap, Heroku, Netlify

- Built a full-stack social media web application for developers to create and share their profiles and posts online
- Managed all application states using Redux to create reusable functional components in React
- Designed REST API for Express Router middleware-based APIs with MongoDB integration
- Developed responsive and interactive UI elements and animations with HTML, CSS, and Bootstrap

Exercise Tracking Web Application   Live Site | GitHub

React, MongoDB, Express, Node.js, JavaScript, HTML, SASS, Heroku, Netlify

- Built a full-stack web application using React and Node to add, edit, and view exercise
- Designed REST API endpoints that implement database connections using Express and MongoDB
- Deployed server-side and database build to Heroku and client-side code to Netlify

Virtual Stock Trading Web Application

Python, Flask, SQLite, HTML, CSS, Bootstrap, Jinja

- Built a full-stack web application with Flask to create user accounts and search, buy, and sell virtual stock
- Utilized the IEX Cloud API to query for real-time stock market quotes
- Implemented database connections with SQLite and Python to store and organize transaction history

Autonomous Object Recognition Self-Balancing Robot

Python, C++, Linux, ROS (Robotic Operating System), TensorFlow, Raspberry Pi, Arduino

- Programmed object detection of vehicles using TensorFlow with 90% accuracy
- Implemented autonomous navigation using C++ and Python with the ROS navigation Stack
- Developed a closed loop PID control algorithm using C++ and Python to test self-balancing system

Education

Ontario Tech University	Apr. 2020
Bachelor of Engineering (Honours), Mechatronics Engineering	Oshawa, ON
App Academy	Sep. 2020 – Feb. 2021
Software Engineering Bootcamp – Full Stack Web Development Track	Online

Experience

Dynaplas Ltd.	Sep. 2018 – Apr. 2019
Junior Manufacturing Engineering Coop	Toronto, ON

- Automated quality inspection of automotive parts by programming a collaborative 6-axis robot arm
- Designed guarding layouts and fixtures using SOLIDWORKS to ensure safety and efficiency on the plant floor

Brockport Home Systems	May. 2016 – Aug. 2016
Junior Project Analyst	Etobicoke, ON

- Re-designed and fabricated pneumatic lifting table using Siemens NX and welding to optimize workspace
- Tested small scale pneumatic and hydraulic actuators using sensors to verify functionality for future projects