


LOIC MURUMBA

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SKILLS

ADVANCED

Java • C++ • Javascript • Git
Android • HTML • CSS
Node.js • Rails

PROFICIENT

Python • jQuery • Ruby
HTTP • MySQL • Firebase
Redux • Websockets

FAMILIAR

React • Machine Learning
Unity • \LaTeX • REST API
PHP • Embedded Systems

EDUCATION

UNIVERSITY OF WATERLOO

BACHELOR'S DEGREE

Electrical and Computer Engineering
Expected May 2021 | Waterloo, ON

Term Avg: 90%, Rank: 10/97

Dean's Honour List

Scored 100% in C++ Programming Course

DOVER BAY SECONDARY

June 2016 | Nanaimo, BC

Best in Class Award for Programming
(Ruby, Java)

Graduating Avg: 96.75%

AWARDS

Elected Class Valedictorian

2016 Horatio Alger National Scholar

Selected for Overcoming Adversity,
Academic Excellence, and Leadership

President's Scholarship of Distinction

UW Entrance Average > 95%

Richard Madter Entrance Scholarship

Selected for Extra Curricular Work and
Academic Excellence

INTERESTS

Futsal • Cooking • Fitness • Design • Art

Photography • Music • Hackathons

RELEVANT EXPERIENCE

MITRE MEDIA | WEB DEVELOPER

Sept 2017 – present | Toronto, ON

- Developing features and improving page load times on a ruby on rails engine for a popular financial website
- Refactoring stock rating system used by thousands of users with Rails and MySQL. 2000+ stocks ranked using this algorithm
- Converted PHP free-trial logic to use Rails backend, designed HTML frontend
- Working in agile environment, helping organize sprints with content experts

WATERLOO HYPERLOOP | SOFTWARE TEAM MEMBER

March 2017 – present | Waterloo, ON

- Creating 3d simulation of pod to showcase on team website using three.js
- Designed web-based dashboard that updates in real time based on sensor outputs using Websockets, C++, React and Redux

MIDNIGHT SUN SOLAR CAR TEAM | WEB DEVELOPER

May 2017 – present | Waterloo, ON

- Re-structuring the website design using CSS, jQuery, bootstrap, and Javascript
- Working with other students to maintain clean codebase
- Website can be viewed at uwmidsun.com

STARTERHACKS | ORGANIZER

Oct 2017 – present | Toronto, ON

- Technical team member tasked with mobile and web development
- Developing Rails app for users to register for the hackathon more easily
- Organizing event schedule and other logistics with team members

PROJECTS

FOODFEED | MOBILE APP (IN PROGRESS)

- iOS and Android app allowing users to easily browse and save recipes
- Uses Javascript and Reddit API to collect and organize recipes on Firebase

PLATFORMER AI | JAVASCRIPT

- 8 initially random neural networks play a simple 2D game and learn to improve over time
- Coded a genetic algorithm which selects the 4 most successful nets and reproduces them into the next iteration with some mutation
- Within a few iterations, networks learn to play the game very effectively

SLICE | WEB GAME (IN PROGRESS)

- Realtime online multiplayer combat game, players connect from different browsers to battle
- Developing backend using node.js and websockets

SOAR | ANDROID GAME

- Simple yet challenging platformer where player must avoid obstacles
- Implements real-time database to keep track of worldwide highscore
- Available on the Google Play Store

GESTURE-CONTROLLED 2048 GAME | JAVA/ANDROID STUDIO

- Recreation of 2048 game using the accelerometer to generate actions
- Designed state diagram; earned 100% in Embedded Systems course