MICHAEL MARCHESI

https://michaelmarchesi.github.io/michaelmarchesi

INFO

EMAIL
michaelmarchesi@hotmail.com

Thesis (WIP)

Options to address Public Concern regarding Wireless Base Station Installations for 5G
Supervisor: Dr. David Michelson

TECHNICAL SKILLS

Experience with:
Signal Generators & Oscilloscopes
Breadboards
Soldering irons
Multimeters
DE1-SoCs
Power supplies

Computer skills:
Verilog, ARM assembly
C/C++
AutoCAD, Fusion360
ARMSim, ModelSim-Altera
Microsoft Visual Studio

Certifications:
BC Class 5 driver's licence
PADI Advanced Open Water Diver
NLS Lifeguard training

Hobbies

Piano
Skiing, Snowboarding
Photography – https://www.flickr.com/photos/114925175@N04/with/33288832225/

Professional Affiliations

APEGBC
2016-Present

Languages

English – Fluent

French – Intermediate

EMPLOYMENT HISTORY

Jr. Full-stack Developer, Kiwi Collection — Vancouver
May 2019 – Dec 2019
- Refactored JavaScript Behat feature tests, fixed broken tests during package upgrades
- Containerized a SFTP server for account managers using Docker and Ansible
- Updated VM provisioning scripts to reduce CSS/JS Gulp times in Ansible
- Configured Google Analytics for A/B site testing
- Implemented image lazy loading in JavaScript to increase page performance

Build & Release Engineering Intern, GE (Digital) — Burnaby
Sep 2018 – Apr 2019
- Used build tools such as Jenkins to automate the process for developers to package their applications, provision AWS stacks, run test suites and deploy the package
- Maintained dashboard so all teams had visibility of CI/CD pipeline
- Used DataDog to monitor the provisioned stacks and diagnose server issues
- Wrote Bash scripts for devs to provision fast stacks

Co-op Web Developer, Kiwi Collection — Vancouver
May 2017 – Dec 2017
- Merged and deployed code base using Git, Jenkins, and AWS
- Learned how account managers processed information from clients and automated the workflow in Salesforce using Apex triggers

EDUCATION

Electrical Engineering, University of British Columbia — Vancouver
Sep 2016 – May 2021
Bachelor of Applied Science
GPA: 3.20

Engineering Transfer Certificate, Langara College — Vancouver
Sep 2015 – May 2016
GPA: 3.40

Technical Projects

Adjunctive Oral Cancer Screening Device — Vancouver
Sep 2020 – Apr 2021
- Designed new product shell with AutoCAD, tested thermal properties via simulation
- Handled 3D printing of shell and 3D rendering of product due to Covid-19 restrictions
- Performed literature review to validate results thermal simulations against peer-reviewed research papers

3D Printed Face Shields — Port Moody
Jul 2020 – Sep 2020
- 3D printed 120+ face shields to be donated to teachers at Port Moody Secondary
- Used Fusion360 to model face shield for 3D Printing
- Compiled C++ Marlin firmware, update includes TRP, ABL, silent operation

ARC4 Encryption/Decryption DE1-SOC — Vancouver
Feb 2018 – Mar 2018
- Implemented brute force pattern recognition method in Verilog
- Optimized KSA and PRGA by exploiting pipelining

Magnetic Line Tracking Robot — Vancouver
Jan 2017 – Mar 2017
- Programmed the F38x microcontroller in C. Prototyped circuits using breadboard and built a robot able to follow a wireless track that emitted signals created from breadboarded transmitter. Used oscilloscope, multimeters, power supplies to test circuits