

Michael Garas

SOFTWARE DEVELOPER · ELECTRICAL ENGINEER

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Education

McMaster University

Hamilton, Ontario

BACHELOR OF ELECTRICAL ENGINEERING & MANAGEMENT

Sept. 2014 - April. 2020

- Engineering & Management 5-year program integrates the technical education of the engineer with a business education for management.

Work Experience

Bell Canada

Mississauga, Ontario

FULL STACK & DEVOPS INTERN

Aug. 2018 - Aug. 2019

- Setup a Dockerized infrastructure on Bell's Production and Lab environments with Gitlab CI/CD pipelines deploying to Kubernetes clusters.
- Operated and maintained our team's servers, including networking, server setup, troubleshooting, maintenance, and other DevOps tasks.
- Implemented RESTful APIs, core classes, and modules for our Device Automation Framework using Ruby on Rails.
- Developed a JS Frontend to allow users to remotely run tests on Desktop, Android and iOS devices using Selenium and Appium backends.
- Technologies used: Docker, Kubernetes, Git, Gitlab CI/CD, Ruby, Ruby on Rails, Shell scripting, Selenium, Appium, JS, HTML, CSS, Agile, Scrum, Kanban, Networking, DevOps, React, iOS Automation, Android, MySQL, Postgres, Jira, RedHat, Alpine, Ubuntu

McMaster University

Hamilton, Ontario

ENGINEERING DESIGN & GRAPHICS TEACHING ASSISTANT

Sept. 2016 - Apr. 2018

- Graded bi-weekly Autodesk Inventor labs and final project reports for over 30 students, demonstrating attention to detail
- Interviewed and assessed students on their final projects.
- Demonstrated excellent listening, communication and leadership skills while assisting 30+ students with their weekly Autodesk Inventor labs.

Zarpac Inc, Pro Mach

Oakville, Ontario

ELECTRICAL DESIGNER CO-OP

May. 2017 - Aug. 2017

- Helped in creating electrical schematics for control panels and field devices using AutoCAD Electrical.
- Assessed multiple electrical components like VFDs, PLCs, Circuit Breakers, I/O Modules, Power Supplies, Ethernet Switches, and PDBs.
- Assisted in wiring up robot's control panels, including safety circuits & field devices I/O wiring, as well as performing safety distance calculations.
- Assisted with troubleshooting and commissioning packaging machinery on the shop floor and created Electrical BOM's for those machines.

Royal Adhesives and Sealants Ltd.

Etobicoke, Ontario

JUNIOR EQUIPMENT ENGINEER

May. 2016 - Aug. 2016

- Assisted in designing the electrical and mechanical components of specialty graphic (doming) machines and automated packaging equipment.
- Demonstrated exceptional communication skills through interacting with co-workers and managers from different departments.
- Helped in developing proprietary software using C# & prepared technical documents, manuals, drawings, and standard operating procedures.

Skills

Programming Languages: Ruby, Python, C#, Javascript, HTML5, CSS, Shell Scripting

Software Tools & Technologies Rails, Docker, Postgres, Git, Gitlab CI/CD, Appium, React, React-Native, Expo, Firebase, Networking, Heroku, Kubernetes, iOS Automation, MySQL, Flask, Machine Learning, Deep Learning, Tensorflow

Electrical Skills Arduino, PLCs, Serial Communication, Circuit Design & Analysis, AutoCAD Electrical, HMI's
Autodesk Inventor, Microcontrollers, Robotics, Universal Robot (UR) wiring

Projects

Celloscope

MACHINE LEARNING - PYTHON, TENSORFLOW & FLASK

- Utilized artificial neural networks & Image Processing to automate the classification of RBC morphologies
- Built a Web App & deployed it to DigitalOcean to run remote tests and get a Celloscope generated PDF report with the analysis

Michael's Blog

WEB APP - RUBY, RAILS & POSTGRES

- Rails MVC project with articles, users and searching
- Created APIs for the application and used YARD for documentation
- Dockerized application and deployed it to heroku

Quad-copter

ROBOTICS

- Built a quad-copter (drone) from scratch, including designing, building, wiring, programming and testing the drone
- Programmed the Flight Controller, and optimized flight duration by testing various electrical loads with different Li-Po batteries

Gamelo

MOBILE APP - JAVASCRIPT, REACT NATIVE, NODE.JS, MONGODB, AZURE

- A social platform for board game lovers that allows users to meet, compete and become the certified best at their favourite game
- Developed the front end & integrated Google Maps location services
- Deployed the Dockerized app to Azure with custom DNS & setup nginx