

Ryan Marks

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Work Experience

Orbcare Inc.

R&D Contractor
Software R&D Intern
May 2019 - Present
Toronto, ON

- Worked on a team that developed Orbcare's medical practice software using Ruby on Rails and Ember JS
- Performed research and production development to integrate clinics' phone systems with Orbcare, reducing call times
- Reduced developer setup time from a day to 20 minutes by dockerizing the application
- Reverse engineered OAuth and REST APIs using packet analysis to integrate with another medical records system

PortfolioLink

Sole Proprietor
Mar. 2017 - Nov. 2018

- Spun off a contract solution for investment portfolio managers into a SAAS business
- Independently developed a complete minimum viable product using Django
- Created Postgres views to derive position data causing a 4x speedup over Python
- Sold intellectual property and code to a customer bringing the software in-house

CIBC Live Labs

Innovation Engineer
Co-op
May 2016 - Aug. 2016

- Lead a co-op team in development of a Java natural language bot for personal banking
- Served as developer and Natural Language specialist for all co-op Android team
- Developed prototype natural language search solution to compete with vendor proposals
- Collaborated in a Scrum team with story writing, sprint planning, and code review

Intrinsyc Technologies

Software Engineering
Co-op
May 2015 - Jul. 2015

- Developed an Android app that made factory testing of DragonBoard devices 4x faster
- Compiled and flashed Android onto new DragonBoard development platforms
- Implemented a secure update utility in Java for flashing Qualcomm devices

Sunnybrook Research Institute

Focused Ultrasound
Research Student
Jul. 2014 - Aug. 2014

- Analyzed biomedical signals using MATLAB for an experimental brain imaging modality
- Performed experiments with microbubble solutions and ultrasound transducers
- Sped up analysis of animal experiments by 10x by developing vision processing scripts

Education

McMaster University

Bachelor of Engineering
Software Engineering
Sep. 2014 - Present

3.1/4.0 Equivalent GPA

Expected completion: April 2020

Projects

Software Support for Psychology Research

Cognitive Science of Memory and Attention (Milliken Lab)
Sep. 2019 - Present

Lead code reviews with experimental psychologists to identify errors and improve code quality of computer experiments. Automated processing of experiment audio saving 100's of researcher hours.

Anterior EEG Cross-Frequency Correlation in Preoperative Anxiety

J. Sriranjani, C. Chow, R. Marks, & L. Schmidt
Mar. 2019

Developed signal processing algorithms to isolate EEG activity levels in pediatric surgery patients before surgery to examine anxiety.

Project Julius - Epilepsy Safety Tool

1st Place at Deltahacks
Feb. 2015

Project Julius protects people with photosensitive epilepsy from flashing content that could cause a seizure by detecting and blocking it in less than a second. Built using Python and OpenCV.