

Experience

Freelance Sabbatical

May. 2023 - Present
Toronto, ON

- **TypeScript Web Psychology Experiment Platform**
Developed a TypeScript monorepo for building and deploying families of browser based psychology experiments. In use at McMaster University improving code quality and reuse
- **Rust Exhaust Fan Selection Web App**
Built a full stack Rust application for the selection of chemical exhaust fans – modeling diverse fan physics with Rust traits and building web features with Axum and Yew

SeamlessMD Senior Software Developer

Dec. 2021 - Apr. 2023
Toronto, ON

- Led a team that delivered high-impact projects in SeamlessMD's remote patient monitoring apps and internal tools using TypeScript, React, React Native, and Ruby on Rails.
- Enhanced release quality and limited downtime by implementing continuous integration tooling, conducting regular code reviews, and adopting GitFlow-style release management.
- Architected the migration of React and React Native patient apps to a TypeScript monorepo, with shared packages for common logic, improving velocity and reducing bug surface
- Prepared and delivered training, including lectures and pairing sessions to teach non-technical team members how to use Ruby and Typescript to improve the tools they use every day.
- Integrated Bluetooth medical devices with existing health-check surveys within a tight s2-month proposal deadline

TELUS Health Virtual Care (Formerly Akira) Software Developer

Mar. 2020 - Nov. 2021
Toronto, ON

- Worked on Akira's patient experience team to deliver virtual healthcare to eight-hundred thousand Canadians
- Developed major features with React and Ruby, using Kotlin/Swift to integrate web and mobile apps
- Created browser based image processing tools used to extract 100's of new clinician's signatures from photos
- Represented development in product meetings to extract implicit requirements and produce dev-ready feature scopes

Adracare Inc. R&D Contractor, Software R&D Intern

May 2019 - Oct. 2019
Toronto, ON

- Developed radiology and medical practice management software using Ruby on Rails and Ember JS
- Reverse engineered OAuth and REST APIs using packet analysis to integrate with another medical records system
- Integrated clinic phone systems with Adracare, reducing call times and improving patient experience

PortfolioLink Sole Proprietor

Built and sold bespoke analytics software for investment portfolio managers

Mar. 2017 - Nov. 2018
Hamilton, ON

CIBC Live Labs

Innovation Engineer Co-op

May 2016 - Aug. 2016
Toronto, ON

Intrinsyc Technologies Software Engineering Co-op

May 2015 - Jul. 2015
Vancouver, BC

Education

McMaster University

Bachelor of Engineering Software Engineering

Sep. 2014 - Apr. 2020

3.1/4.0 Equivalent GPA

Projects

Interactive Nursing Education (Freelance Project)

May 2021 - Aug. 2021

Operationalized a platform for interactive nursing education used by 50,000 students globally. Converted an AngularJS proof-of-concept to a modular React app and established dev-ops strategy

Gravimetric Dosing Espresso Machine

September 2020 - January 2021

Augmented a second hand espresso machine with new controls electronics enabling precise weight based dispensing of espresso. Built using Typescript, Raspberry Pi, and a Breville Dual Boiler

Software Support for Psychology Research

McMaster Cognitive Science of Memory and Attention Lab

Sep. 2019 - April 2020

Lead code reviews with experimental psychologists to identify errors and improve code quality of computer experiments.