

EXPERIENCE

Software Developer, Intern **Benevity** **Jan. 2023 – Apr. 2023**

- Refactored an internal application that compiles charitable cause information, resulting in a 95% performance increase, using **Vue.js** and **TypeScript** for the frontend and **Java Spring Boot** backend hosted on **AWS EC2**
- Designed and developed a sub-system for storing and retrieving files using **S3** and **MariaDB**, which was crucial for the application's high performance and overall functionality
- Implemented Benevity's in-house design library to create a user-friendly and consistent interface for the app

Software Developer **Airtasks** **Sept. 2022 – Jan. 2023**

- Developed a proof of concept mobile app using **React Native** and **TypeScript** for a collaborative workflow management platform that streamlines the design and modelling of digital twins in construction
- Built user interface to UI and UX specs, ensuring aesthetic and usability consistent with company's web app
- Collaborated with a team of international developers to ensure efficient delivery to startup's growing userbase

Digital Twin Designer **Modern Niagara** **May 2021 – Sept. 2022**

- Implemented automation scripts using **Python** and **Autodesk Revit API** tools which saved the team 100+ hours of work on the project. Designed mechanical system solutions for prefabrication of a new hospital under tight deadlines, ultimately saving the company \$2M while using **Agile** to meet owner requirements
- Created extensive documentation for project onboarding and outsourcing. Used these materials to on-board 3 junior team members and collaborate with an offshore team

Mechanical Engineer **Deepwater Farms** **Sept. 2020 – Apr. 2021**

- Designed and built a logging system in **C++** that uses a microcontroller and flow sensors to monitor and report facility water usage trends, which helped discover a leak and saved 10% on the water bill

Project Engineering Intern **TC Energy** **June 2018 – Sept. 2019**

- Automated the process of communicating field updates to the project team, which saved the company 100+ hours. Responded to 150+ contractor requests for information in a timely manner while mentoring 2 summer students

PROJECTS

Course Cart **Dec. 2022**

- Single page app that fully simulates a course registration system for students and administrators, using **REST API** developed with **Java Spring Boot** and **MySQL**. Hosted using **AWS Elastic Beanstalk** and **Amplify**

Fiberr **Nov. 2022**

- Web app that gives dietary suggestions by scanning barcodes with **OpenCV** and interfacing with **Open Food Facts API** to suggest alternative products that would meet user's criteria. Developed for Hack the Change 2022
- Designed user interface in **Figma** and implemented it in **React** in under 24 hours

EDUCATION

M.Eng. Software Engineering **University of Calgary** **May 2022 – Apr. 2023**

- Graduate Coursework: Software Design and Architecture, System Analysis, Machine Learning, Databases, Big Data, Algorithms and Data Structures, Software Reliability, Data Mining and Deep Learning. GPA 3.9/4.0

B.Sc. Mechanical Engineering **University of Calgary** **Sept. 2015 – May 2020**

- Coursework: Mechatronics, Control Systems, Computing for Engineers, Innovation and Renewable Energy Entrepreneurship (Group Exchange in Shantou University, China), Linear Algebra, Calculus III, Statistics

TECHNICAL SKILLS

- **Languages:** Python, C++, Java, SQL, JavaScript/HTML/CSS, TypeScript
- **Frameworks and Libraries:** Spring Boot, Node.js, React, Vue.js, Bootstrap, MaterialUI, Semantic UI
- **Tools:** AWS (EC2, Elastic Beanstalk, RDS, Amplify, DynamoDB), Maven, Databricks, Postman, Git, Linux