<u>GitHub</u> <u>LinkedIn</u>

Portfolio Website

# Samuel Emard-Thibault

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#### **EDUCATION**

Kingston, ON Queen's University Sept 2020 – June 2024

- Major: Computer Engineering, BASc (Overall GPA: 3.47)
- Relevant Coursework: Data structures and Algorithms, Object Oriented Programming (Java), Computer Architecture, Discrete Mathematics, Mechatronics

#### RELEVANT EXPERIENCE

#### **Production Engineer, Fellow**

## **Major League Hacking**

Jun 2022 - Aug 2022

- Completed 12 weeks of structured curriculum-based learning covering core Production Engineering topics, supplemented with events / workshops hosted by industry experts.
- Worked on an internal hackathon-winning Flask application as a team using GitHub best practices.
- Developed a CI/CD pipeline using unit / integration tests, automated re-deployment scripts, and GitHub Actions.
- Set up system and container monitoring, alerting, and visualization using Prometheus and Grafana.

## **Computer Science Tutor**

## **Moh's Online Tutoring**

Feb 2022 - Present

- Teach High school-level students the fundamental concepts of the Java programming language.
- Review official documentation to ensure lesson plans cater to varying Java Platform releases.

#### **Electrical Team Member**

## Queen's Racing (QFSAE)

Oct 2021 - Present

- Analyze PCB designs using digital logic fundamentals to develop torque vectoring tools.
- Implement CAN bus communication through Arduino Uno controllers to test the interception of sensor data.

#### **PROJECTS**

Portfolio Website (Flask, Jinja, MySQL, JavaScript, HTML/CSS, Bootstrap, Peewee, Bash, Docker)

- Implemented Bootstrap and CSS best practices for a mobile friendly, animated frontend.
- Utilized the Fetch API to retrieve data from a Flask API.
- Developed models using the Peewee ORM to add and receive data from a MySQL database.
- Containerized and orchestrated applications, databases, and NGINX reverse proxies using Docker.
- Implemented user authentication with password hashing and session management.

CookHack - QHACKS 2022 1st place, HotG Category (React.js, Flask, MongoDB, Firestore, HTML/CSS)

- Developed a Flask backend API and MongoDB collections to store and serve data to a React web app.
- Implemented the logic used to recommend recipes based on user inputs.

MongoWheels (Spring Boot, Thymeleaf, MongoDB, SQL, Bootstrap, HTML/CSS)

- Developed a MongoDB collection to store automotive data and serve it to a Spring Boot web API.
- Integrated the MVC design pattern by dividing elements based on their functionalities for a modular codebase.
- Worked on the Spring Security implementation to authenticate users and secure critical API endpoints.

## **S**KILLS

Languages: Proficient: Java, Python, C/C++ Familiar: JavaScript, Bash

Tools/Frameworks: Proficient: Git/GitHub, Flask, HTML/CSS/Bootstrap Familiar: Spring Boot, React.js, Docker

Databases: Proficient: Firestore, MongoDB Familiar: MySQL, Peewee ORM