GitHub
LinkedIn
Portfolio Website

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# Samuel Emard-Thibault

## 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), Software Quality Assurance, Operating Systems, Microprocessor Systems, Discrete Mathematics.

## RELEVANT EXPERIENCE

**Production Engineer, Fellow**        **Major League Hacking**        **Jun 2022 – Aug 2022**

- Completed 12 weeks of structured curriculum-based learning covering core Production / Site Reliability Engineering topics, supplemented with events / workshops hosted by industry experts.
- Worked on a hackathon-winning Flask application as a team using GitHub and the SCRUM methodology.
- Developed a CI/CD pipeline to automate testing and deployment using Docker, Bash, Pytest, and a CentOS VPS.
- Set up system and container monitoring using Prometheus and Grafana to maintain deployment servers.

**Computer Science Tutor**        **Moh's Online Tutoring**        **Feb 2022 – Present**

- Organized High school-level lessons to introduce the fundamental concepts of the Java programming language.
- Reviewed official documentation to ensure lesson plans cater to varying Java Platform releases.

**Electrical Team Member**        **Queen's Racing (QFSAE)**        **Oct 2021 – Present**

- Analyzed and designed printed circuit boards using Altium to manufacture reliable electrical components.
- Implemented CAN bus communication through Arduino Uno controllers to test the interception of sensor data.

## PROJECTS

**Portfolio Website** – **Internal MLH Hackathon, 1st place** *(Flask, Jinja, MySQL, JavaScript, Bootstrap, Peewee, Docker)*

- Developed a full-stack Flask application using a custom-built CI/CD pipeline and Git version control.
- Utilized the Fetch API to retrieve view and database data from a Flask API.
- Developed data models using the Peewee ORM to facilitate the creation and manipulation of MySQL tables.
- Containerized applications, databases, and NGINX web servers using Docker to facilitate deployment.
- Implemented user authentication with password hashing and session management for a robust backend.

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

- Migrated a MongoDB/Flask backend to a Firestore database to simplify the architecture and optimize queries.
- Implemented the frontend logic used to display recommended recipes based on user inputs.

**Minute Tutor** – **#HackTo 2022, 1st place overall** *(React.js, Flask, MySQL, Peewee)*

- Developed a Flask backend to algorithmically serve database records to a React web app.
- Worked on parsing JSON responses on the frontend to display tutor information on a user-friendly interface.
- Implemented user authentication using MySQL to allow tutors to easily update their personal information.

## SKILLS

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|---|---|---|
| **Languages:** | **Proficient:** *Java, Python* | **Familiar:** *JavaScript, Bash, C/C++* |
| **Tools/Frameworks:** | **Proficient:** *Git/GitHub, Flask, HTML/CSS/Bootstrap* | **Familiar:** *Spring, React.js, Docker* |
| **Databases:** | **Proficient:** *Firestore, MongoDB* | **Familiar:** *MySQL, Various Python ORMs* |