# Dashiell Rich

hello@dashiellrich.com | linkedin.com/in/dashiell-rich/ | github.com/dashiellmr

#### **EDUCATION**

McGill University

May 2025

Bachelor of Science in Computer Science

Montreal, QC

• Relevant Coursework: Data Structures and Algorithms, Operating Systems, Distributed Systems, Computer Networks, Software Design, Software Architecture, Programming Languages, Computational Linguistics, Natural Language Processing, Software Systems, Algorithm Design, Theory of Computation

#### Experience

Verkada

May 2024 – August 2024

Software Engineering Intern

San Mateo, CA

- Built a TypeScript and Vue.js web app to sanitize network packets, safeguarding confidential data for 500+ customers and aiding 100+ support agents.
- Decreased data sanitization time by 93% through algorithm optimizations using regular expressions.
- Created a database for replacement unit requests using Python, AWS SDK, and DynamoDB that prevented repeat requests from arriving at the fulfillment team saving 10+ man hours per month.
- Streamlined deployment pipeline by designing 7 secure Terraform modules and automating over 10+ scripts.

## Prometheus Lab, McGill University

May 2023 – August 2023

Undergraduate Researcher

Montreal, QC

- Developed a real-time obstacle detection system for a maze-navigating robot using Python and OpenCV
- Achieved 88% detection accuracy via a convolutional neural network trained with Scikit-learn.
- Improved model performance by 20% through hyperparameter tuning using K-fold cross-validation.

## PROJECTS

#### McRap | Hack McWiCS Hackathon (Awarded 1st Place)

- Created a web app that transforms students' notes into vibrant rap songs to assist with memory retention.
- Integrated JavaScript and Django with LLMs and AI TTS to create fully-voiced songs in under 20 seconds.
- Won Best Overall Hack at Hack McWiCS while competing against over 100 participants.

#### Threshed | Open-Source Discord Bot

- Developed an open-source Discord bot in Python using Riot Games' API to provide insights on player stats.
- Decreased latency by 17% by creating an intermediary Flask server that batched requests.
- Engineered pipelines to combine data into novel info, including average rankings and common compositions.

#### Extracurriculars

#### Hack4Impact

September 2024 – Present

- Worked in a team of 12 on the Logistics backend for the Welcome Collective, a non-profit assisting refugees by supplying them with furniture, clothing, and food.
- Developed and implemented TypeScript APIs using Express.js, enabling seamless data retrieval from our team's database for sister teams, improving cross-team collaboration and system efficiency
- Utilized PostgreSQL to store task data facilitating pick up and delivery scheduling for 100+ volunteers.

#### McGill Undergraduate Science Research Journal (MSURJ)

September 2023 – May 2024

- Planned and oversaw a Python workshop teaching students the basics of natural language processing.
- Performed duties such as coordinating with peer reviewers, editing manuscripts, and maintaining journal website.

# McGill Formula Electric (FSAE)

October 2021 – October 2023

- Created components using React.js and JavaScript for the team website redesign.
- $\bullet$  Conducted material analysis for the aerodynamics team using AutoCAD leading to fin mass dropping by 90%

#### SKILLS

Languages: Python, TypeScript, JavaScript, Java, Go, SQL, HTML/CSS

Frameworks: Flask, Django, Express, Gin, Vue, React, Tailwind

Databases: MongoDB, MySQL, PostgreSQL, DynamoDB

Tooling & DevOps: Node.js, Terraform, Github Actions, Amazon Web Services, Shell Scripting, Bash, Git, Docker