HOTH STEPHEN BAR JOCK

Montreal, QC | hoth.jock@mail.mcgill.ca | linkedin.com/in/hothjock | github.com/hothbar | hothjock.com

EDUCATION

McGill University Montreal, QC

Bachelor of Science in Computer Science, Minor in Economics *Aug 2023 – Expected 2028*

- Awards: WUSC Student Refugee Program Scholarship (2023); National Award, top 1% of A-Level students, Uganda (2022)

EXPERIENCE

FluidAI Medical Sep 2026 – Present

Data & AI Engineering Associate (Intern) *Kitchener, ON*

- Designed the move of an AI-assisted clinical review tool from browser-only storage to a shared backend, including the API contract and PostgreSQL schema, implemented in Python and FastAPI
- Built authentication and role-based access control with Firebase Auth, including admin-managed accounts and immediate access revocation
- Added safeguards for concurrent reviewers and reliable submissions to an external system, using version checks, an audit trail and database locks

Brian Chen Lab, McGill University May 2026 – Aug 2026

Research Software Developer (Backend Lead) *Montreal, QC*

- Led backend development of Enzygent, an enzyme-prediction platform built with FastAPI, SQLAlchemy and RDKit
- Added a reproducibility system so prediction results can be regenerated exactly, and contributed to the project's automated test suite
- On the GeneDig platform rebuild, set up the FastAPI and PostgreSQL backend with database migrations and a GitHub Actions CI pipeline

Site Administrator & Web Developer (part-time) *Feb 2025 – Aug 2026*

- Maintained the lab's WordPress sites and the genedig.org bioinformatics tool, fixing bugs and reorganizing site content
- Set up a standard local development environment (XAMPP, MySQL) to make onboarding new contributors simpler

PROJECTS

HothTV | *Java 17, Spring Boot, PostgreSQL, Flyway* Nov 2025 – Present

- Built a layered REST API with JWT authentication through Spring Security and role-based access control
- Modeled films and episodes as shared content types in PostgreSQL and managed schema changes with Flyway

ShiftPredict | *React, Node.js, Express, Gemini API* Mar 2026

- Built for a Vocantas / Valsoft project challenge: a weighted scoring model that rates shift staffing risk and explains each factor's contribution
- Used the Gemini API to draft risk explanations and outreach messages, with a fallback when the AI call fails

McMeet | *React, Express, SQLite, Sequelize* Feb 2026 – Apr 2026

- Team course project: an office-hours booking platform. Restructured the frontend and backend, built availability management, and wrote the database schema

TECHNICAL SKILLS

Languages: Python, Java, SQL, TypeScript, JavaScript, C++
Backend and Data: FastAPI, Spring Boot, Node.js, Express, SQLAlchemy, PostgreSQL, MySQL, Alembic, Flyway
Frontend: React, Chrome Extensions (Manifest V3)
Tools: Git, Docker, Docker Compose, GitHub Actions, Firebase Auth, OpenAPI