Michael Ha

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Education

McGill University **Aug. 2024 – Dec. 2028**
Bachelor of Engineering in Software Engineering Co-Op *Montreal, Quebec*
- GPA: 3.87

John Abbott College **Aug. 2022 – May 2024**
Diploma of College Studies in Sciences *Sainte-Anne-de-Bellevue, Quebec*
- R score: 34.519
- Four-time Dean's list recipient and English Honours Portfolio (excellence in written English)

Skills

Languages: English (native), French (native), Vietnamese (elementary)
Programming Languages: Java, Python, C, C#, Bash, JavaScript, HTML/CSS, VHDL, R, Umple
Developer Tools: IntelliJ, PyCharm, VS Code, Eclipse
Technologies/Frameworks: Node.js, Express.js, EJS, Flask, Bootstrap, JavaFX, Tkinter, Selenium, BeautifulSoup, Linux, GitHub, SCRUM

Projects

Portfolio Website (Link) | *HTML, CSS, JavaScript, Node.js, Express.js, EJS* **Jan. 2026**
- Developed a personal portfolio website to showcase my projects and skills using EJS templating with Node.js and Express.js for server-side rendering (backend).
- Implemented a responsive frontend using HTML, CSS, and JavaScript to enhance user experience and accessibility.
- Developed a resume parsing feature to extract project information from uploaded resume and dynamically generate the project section page.

Automated Courier Robot with BrickPi | *Python* **Sep. 2025 – Dec. 2025**
- Collaborated in a team of 6 to iteratively design and implement hardware and software for a small-scale autonomous delivery robot using EV3 sensors, motors, and Raspberry Pi, with full version control integration.
- Architected multi-threaded system handling synchronized robot navigation, real-time sensor alignment, color-based object detection, and state machine-driven event handling for autonomous task execution.

Cheese Manager MVC | *Java, JavaFX, Umple* **Sep. 2025 – Dec. 2025**
- Engineered a comprehensive MVC application in a 7-person team, designing a domain model with integrated state machine logic, backend controller layer, and JavaFX GUI for managing cheese inventory, orders, and sales in wholesale supply chain scenarios.
- Achieved 100% test acceptance by implementing 200+ distinct test scenarios using Gherkin specifications and Cucumber framework, ensuring robust validation of all controller operations and business logic.

Anilist Automated Liker | *Python, Selenium, Tkinter* **June 2025**
- Developed an automation tool leveraging Selenium for web scraping and Python scripting to streamline repetitive user interaction tasks on the Anilist platform with timeout validations.
- Engineered an intuitive Tkinter-based GUI enabling users to securely manage local authentication credentials and customize automation parameters, while implementing intelligent rate-limiter to respect API constraints.

Population Common Ancestor Simulation | *R* **Apr. 2024 – May 2024**
- Collaborated in a two-person team to build a probabilistic simulation modeling ancestry relationships and computing the most recent common ancestor across varying population demographics.
- Applied advanced statistical visualization techniques in R to analyze population trends and distribution patterns, translating complex genetic data into actionable insights.

Other Experience

@Hack 2025 (CTF Hackathon) **Mar. 2025**
Participant *Montreal, Quebec*
- Collaborated in a team of 2 to tackle CTF-style security challenges.
- Won first prize in the hardware time-based challenge.

French Tutoring **Jan. 2024 – May 2024**
Tutor *John Abbott College*
- Provided weekly academic support to beginner and intermediate French learners through the CAF - Moniteurs de Français program.
- Helped students strengthen French grammar, reading comprehension, vocabulary, pronunciation, and conversational skills in a structured, cooperative, and peer-led setting.