

Mahan Maalekian

514-560-3274 | maalekianmahan@gmail.com | linkedin.com/in/mahan-maalekian | github.com/mahanmaalekian

EDUCATION

McGill University

Montreal, QC

Bachelor of Engineering in Software Engineering Co-op

Aug. 2023 – May 2027

- **Relevant Coursework:** Data Structures and Algorithms (**Java**), Fundamentals of Software Development (**Java**), Model Based Programming (**Java**), Software Systems (**C**, **Linux**, **Bash**)
- 4.0/4.0 CGPA
- J.W. McConnell McGill 3000\$ Scholarship

EXPERIENCE

Novatek International - ntint.com

Montreal, QC

Backend Software Engineer Intern

May 2024 – August 2024

- Engineered **10+ API endpoints** from scratch in **ASP.NET** to enable users to configure and manage personal website settings
- Using the Database-First approach, developed **SQL** scripts to create the necessary schema and tables to support the settings management functionality I implemented. Used **Entity Framework Core** to generate corresponding **C#** models from the **SQL Server** database
- Automated **50+ API endpoint tests** in **Postman** using **JavaScript**
- Optimized **10+ API endpoints** by reducing the number of times they called the database, resulting in a **5-10x** faster response times
- Refactored **50+** service methods to reduce their cognitive complexity and make the code more maintainable
- Integrated **SonarQube** into the team's main **CI/CD pipeline** on **Azure DevOps**, having an enormous impact on the team's ability to manage the security and maintainability of the **C#.NET** code

Velan Inc. - velan.com

Montreal, QC

Software Engineer Intern

June 2023 – August 2023

- Developed a **full stack web application** using **ASP.NET MVC** that enables the company's employees worldwide to conveniently select and install the company's provided software
- Enhanced a **WPF** application's user experience by introducing **asynchronous methods** to keep the UI interactive while other time-consuming operations load in the background

PROJECTS

Vanier Exam Scheduler | vanier-scheduler-railway.app | [Git](https://github.com)

Django, HTML/CSS, JS, PostgreSQL

- Designed and deployed a **final exam scheduling tool** using **Django (Python)**, **HTML**, **Vanilla CSS** and **JavaScript**, leveraging **PostgreSQL** for data storage. Prioritized a delightful UI that is utilized by **hundreds** of Vanier College students to effortlessly search for their final exams, add them to their schedules, and export them to their preferred calendar

McGill Robotics Rover Software Engineer | [Git](https://github.com)

ReactJS, ROS, Python, C++, Bash

- Developed a **React**-based control interface for the rover, enabling real-time robot navigation by displaying GPS coordinates, location tracking, and velocity data, while providing manual control capabilities for competition environments
- Engineered drive control systems for the rover using **ROS** in **C++** and **Python**, implementing publishers, servers, and control protocols to manage wheel movement and ensure responsive, real-time navigation during competitions

Colorful Block Game | [Git](https://github.com)

Java, JUnit, Swing

- Created a two-player game featuring a colorful and engaging UI, where opponents compete to create the largest block using a variety of strategic moves
- Implemented recursive algorithms to handle the recursive nature of the block configurations

TECHNICAL SKILLS

Languages: Python, C#, C++, Java, JavaScript, HTML/CSS, SQL, C, VHDL, Bash

Libraries/Frameworks: ReactJS, NodeJS, Django, Windows Presentation Foundation, ASP.NET, Bootstrap, NumPy

Developer Tools: Git, GitHub, Azure DevOps, VS Code, Visual Studio, Postman, Docker, Linux