

# MALCOLM ST. JOHN

COMPUTER ENGINEERING

malcolm.st.john@usherbrooke.ca

[github.com/ArcticWalrus](https://github.com/ArcticWalrus)

## EDUCATION

---

### Université de Sherbrooke

Sherbrooke, QC (2017-2021)

- B. Eng. Computer Engineering
- Treasurer of the Computer Science club

### McGill University

Montreal, QC (2015-)

- B. Sc. Honours Applied Mathematics (30 credits)

### Cégep de Sherbrooke

Sherbrooke, QC (2012-2015)

- College diploma in natural sciences and music
- National finalist for the Canadian Music Competition in 2013 and 2015
- Marie-Victorin prize for excellence in mathematics, 2015

## PROFESSIONAL EXPERIENCE

---

### Last Link Dynamics

Java, Angular, PostgreSQL, Google Cloud

Remote (Fall 2020)

- Employee number 3 at a startup working on delivery optimization.

### Media5 Corporation

Systems programmer; Bash, C, C++

Sherbrooke, QC (Winter 2020)

- Developed and repaired custom minimalist linux solutions for several CPU architectures.
- Upgraded custom boot monitor to save certain parameters allowing for rebooting without user input.

### CGI Inc.

Full stack developer; Java (Spring), Typescript (Angular), Microsoft SQL Server

Sherbrooke, QC (Summer 2019)

- Conception and implementation of API endpoints based on client specifications.

### Ubisoft Montreal

Tools developer TG/Pilot; C++

Montreal, QC (Fall 2018)

- Generation of 3D navigation data for all the Ubisoft AAA games that use dynamic environments.
- Designed and implemented a new data management model for storing environment data of game instances in the cloud.
- Analysis of performance statistics for the generation of 3D environments.

### École de musique Pianissimo

Piano and violin professor

Sherbrooke, QC (2014-2018)

- Taught classical piano and violin to students of all ages and levels including students preparing for national level competitions.

## PROJECTS

---

### Senior design project : Ubivius

Summer 2020 - Fall 2021

- Project in association with Ubisoft Montreal. I work on designing and building microservices in Go, a full CI/CD pipeline with Github Actions and I also have the role of scrum master for a team of 8 people.

### Conductify at ConUHacks

January 2020

- Created an application that requests a song of a users choice from the Octave api and uses machine learning to split the instruments that can then be controlled by a motion sensor to change the volume of each instrument (Python).

### Arduin-O'clock

September 2020

- Built myself a new custom alarm clock with an arduino UNO at PennApps XXI.

### Biometrics analyser for stationary bike

Winter 2019

- Worked on a platform that receives and analyzes biometric data before sending it for display on a user interface (VHDL, C, MIPS assembly, Angular).

## SKILLS

---

**Programming** C, C++, Python, Go, Java, Bash scripting, MIPS assembly

**Frameworks** Spring Boot, Flask, Go-Swagger

**Tools** Git, Google Cloud, L<sup>A</sup>T<sub>E</sub>X, Github Actions

**Languages** English, French