

Work Experience

- **Hekaton Studio** Kitchener, ON
Co-Founder *April 2019 to Present*
 - Producer for Deeper Worlds (C# and Unity3D)
 - Lead Developer for the in-house game engine (Rust)
 - Business Development
 - Financial Planning
- **Clearpath Robotics** Kitchener, ON
Product Application Developer *December 2018 to July 2019*
 - Development of a web application frontend to interact with a fleet of robots (React and JavaScript)
 - Development of a web-based ROS node to control a robot over REST and WebSocket (Flask and Python)
 - Development of an OPC-UA ROS Bridge for integrating with PLC's (Python and Ignition)
- **Savoir-Faire Linux** Montréal, QC
Free Software Consultant *July 2018 to December 2018*
 - Leading and Managing the Python Web Development team
 - Development of web applications for clients in Django and Node.js
 - Development of free software tool in Python
- **LBRY inc.** Manchester, NH
Junior Web Engineer *January 2018 to July 2018*
 - Development and maintenance of the lbry.io website
 - Development of a Back-End API in Go
 - Development of web applications in Go, Node.js, PHP, and Python
 - Contributing to the desktop application (JavaScript, React and Electron)
- **Lockbird inc.** Montréal, QC
Software and Hardware consultant *March 2017 to November 2017*
 - Hardware development of the first laser turret prototype for bird control
 - Software development for laser control and motion planning
 - Development of the Onboard Control Panel for configuring the different mode
- **Savoir-Faire Linux** Montréal, QC
Django developer *April 2016 to August 2016*
 - Django developer for the Sous-Chef community project for the Santropol-Roulant
 - Engaging the Open Source community to contribute to the project
 - Sous-Chef source code is available on GitHub (<https://github.com/savoirfairelinux/sous-chef>)

- **Pratt & Whitney Canada**
Advance Quality Assurance Intern
 - Analysing aircraft engine parts with Non-Destructive testing
 - Investigating failure rate and condition

Longueuil, QC
January 2014 to April 2014

Student Clubs

- **Walking Machine** Montréal, QC
Lead software developer *March 2016 to December 2017*
 - Lead Developer for our General Purpose Service Robot for Home S.A.R.A for the RoboCup@Home competition
 - Development of Object Detection algorithm for finding an object in an unstructured environment (Python and OpenCV)
 - Development of Gender and Emotion recognition using CNN (Python and Keras)
 - Development of Custom Navigation Planner and Layer using the ROS Navigation Stack (ROS and C++)
 - Implementation of algorithms from research papers
- **Club Conjure** Montréal, QC
Game Programmer *April 2016 to December 2016*
 - Participated in multiple Game Jam
 - Creation of a homebrew arcade cabinet
- **Club Capra** Montréal, QC
Electrical and Software team member *November 2015 to September 2016*
 - Conception of a power delivery system for an autonomous ground vehicle
 - Work on developing motion controller in ROS using `ros_control`
 - Building SPI device to monitor battery level and amperage draw
 - Diagnostic of electrical and software failure
- **BajaETS** Montréal, QC
Electrical team member *September 2013 to November 2015*
 - Developed a CAN-based data acquisition device for the race vehicle based on various sensors

Volunteer Work

- **RoboCup@Home**
OC Chair *July 2018 to Present*
 - Responsible for the Plannification and Logistics of the biggest service robotics competition in the world
 - Act as the point of contact for the LOC of the current host country
- **RoboCup Montréal 2018** Montréal, QC
Major LOC Chair *July 2017 to July 2018*
 - Part of the organising committee of the biggest robotic competition in the world
 - Responsible of the @Home, @Work, RoboCup Logistics, and Simulation

Education

- **Concordia University** Montréal, QC
Independent Student January 2018 to December 2018
- **École de Technologie Supérieure** Montréal, QC
Bachelor degree of Engineering in Information Technology 2015 to 2017
 - Completed 62 credits
- **École de Technologie Supérieure** Montréal, QC
Bachelor degree of Engineering in Automated Production 2013 to 2015
 - Completed 32 credits
- **CCNB - Bathurst** Bathurst, NB
Technologie du Génie Électronique 2011 to 2013

Skills

- **Programming Language:** Bash, C, C++, Go, JavaScript, Node.js, PHP, Python, Rust
- **Software:** Altium, Ansible, Django, Docker, Git, Keras, Linux, MacOS, OpenCV, PCL, ROS, Vim, Windows

Conference

- Challenges surrounding autonomous service robots
 - Presented at LIVIA on December 6th 2017
 - Slides
- Walking Machine
 - Presented at École de Technologie Supérieure on February 16th 2017