

## Work Experience

- **Hekaton Studio** Kitchener, ON / Montréal, QC / Remote  
*Technical Director/Co-Founder* April 2019 to Present
  - Deploying Client Application to AWS and our in-house Dokku Container server
  - Developing Custom Software for our various Clients (Node.JS, Python, PHP)
  - Planning Development Sprint with the client or stakeholder
  - Managing and Invoicing Clients
- **Lighthouse Labs** Remote  
*Web Boot camp Mentor* September 2021 - Present
  - Mentoring the different Web Boot camp cohort by answering question about Node.JS and React
- **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 and maintenance of a web-based ROS node to control and setup a single robot over REST and WebSocket (Flask and Python)
  - Designing and Development of an OPC-UA ROS Bridge for integrating with PLC's (Python and Ignition)
  - Integration of third-party API to the fleet management software
- **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 REST API Back-End in Go
  - Building and Designing application to interact with the blockchain (Go, JavaScript 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 options

- **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>)

## 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
  - Planning the robots main architecture
  - 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**  
*Organizing Committee Chair* *July 2018 to Present*
  - Responsible for the Planning and Logistics of the biggest service robotics competition in the world
  - Act as the point of contact for the Local Organizing Committee of the current host country
- **RoboCup Montréal 2018** Montréal, QC  
*Major Local Organizing Committee 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, Java, JavaScript, Node.js, PHP, Python, Rust
- **Software:** Altium, Ansible, Django, Docker, Git, Keras, Linux, MacOS, Numpy, OpenCV, Pandas, PCL, ROS, Vim, Windows

## Conference

- Why are robots becoming Pythonistas?
  - Presented at Montréal Python on November 5th 2018
  - Video
  - Slides
- Challenges surrounding autonomous service robots
  - Presented at LIVIA on December 6<sup>th</sup> 2017
  - Slides
- Walking Machine
  - Presented at École de Technologie Supérieure on February 16<sup>th</sup> 2017