Maxime St-Pierre

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Work Experience

- **Hekaton Studio** — Kitchener, ON
  Co-Founder — *April 2019 to Present*
    - Game Developer for an unannounce project (C#)
    - Lead Developer for the in-house game engine (Rust)

- **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)

- **Savoir-Faire Linux** — Montréal, QC
  Free Software Consultant — *July 2018 to December 2018*
    - 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

- **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** — Longueil, QC
  Advance Quality Assurance Intern — *January 2014 to April 2014*
    - Analysing aircraft engine parts with Non-Destructive testing
    - Investigating failure rate and condition

Student Clubs

- **Walking Machine** — Montréal, QC
  Lead software developer — *March 2016 to December 2017*
  - Lead Developer for our General Purpose Service Robot S.A.R.A for the RoboCup@Home competition
  - Development of Object Detection algorithm for finding an object in an unstructured environment
  - Development of Gender and Emotion recognition using CNN
  - Development of Custom Navigation Planner and Layer using the ROS Navigation Stack
  - 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

Volunteer Work

- **RoboCup@Home**
  OC Member — *July 2019 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@Home**
  OC Member — *July 2018 to July 2019*
  - Part of the organising committee for the RoboCup@Home league

- **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