

PHILIPPE MARCOTTE

@ marcotte_philippe@hotmail.com

🔗 philippemarcotte.github.io

🔗 github.com/PhilippeMarcotte

in [linkedin.com/philippe-marcotte](https://www.linkedin.com/in/philippe-marcotte)

☎ 438-391-8381

EXPERIENCE

Applied Research Intern

Druide

📅 August – November 2019 📍 Montreal, Canada

- Researching the best ways to tackle grammatical error correction problem with state-of-the-art NLP models in the context of integrating the solutions to the main software Antidote.

DevOps Intern

Giro

📅 May - August 2017 📍 Montreal, Canada

- Developing web tools in Javascript for helping developers managing tickets and issues on Team Foundation Server (TFS).
- Correcting bugs on back-end applications in C# for the integration of TFS to Visual Studio.

Software Engineer Intern

Audiokinetic

📅 May - August 2016 📍 Montreal, Canada

- Adding features to the main software, Wwise, UI.
- Adding features to C++ sound engine.

Junior Software Developer

XYJ

📅 July 2015 - January 2016 📍 Montreal, Canada

- Development of web scrapers for automatic data collection on clients' competitors.

TECHNICAL SKILLS

- Python, C++, C#, Java, HTML/CSS, JavaScript
- Pytorch
- Git
- Test Driven Development, Continuous Integration, Agile

LANGUAGES

- Français: Native language
- English: Spoken, written and read

HOBBIES

- Bouldering
- Video games
- Listening to music.
- Self-hosting web services for the sake of it.

EDUCATION

Machine Learning

Professionnal Master

📅 May 2020 📍 Mila/Universite de Montreal

Software Engineering

Bachelor's Degree

📅 2018 📍 Polytechnique de Montreal

Sciences, Mathematics and Computer science

Diploma of Collegial Studies

📅 2014 📍 College Bois-de-Boulogne

PROJECTS

Residual Policy Learning for self-driving robot

- For a robotic class named [Duckietown](#), we attempted to apply reinforcement learning to help a robot follow a lane. A PID controller was already implemented so we applied the model on top of it with the goal of making it learn a correction that would enhance the basic controller.

HDR image generation with deep learning

- The project consisted in reproducing the experiment describe in this [paper](#) from Kalantari, Nima Khademi and Ramamoorthi, Ravi. The experiment consisted in fusing three ordinary images (Low Dynamic Range) of different exposition time from the same scene in one HDR image. For this reason, an optic flow algorithm was used to align the lowest and highest exposition on the normal exposition image. Then, a convolutional network was used to model the fusing process.

Home Server

- Home server running Ubuntu 18.04 headless on an Odroid HC2. I run multiple services like a password manager (Bitwarden), cloud storage (Nextcloud) and multimedia player (Plex). All these services are compartmentalized in docker containers. Outside network traffic is manage through a reverse-proxy (Nginx) and secure https connection is done with the help of Lets encrypt.