

GUILLAUME LAM

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WORK EXPERIENCE

Ormuko

May 2019 - Aug 2019

Software Developer Intern (Montreal, Qc)

- Developed new algorithm for identify keywords of error messages for self-healing environments. This led me to fixing the unsupervised clustering algorithm and designing a new structure which was all written in **Python**.
- Implemented new services and calls for the platform in the backend using the framework **Flask**.
- Developed new features in the frontend using **React**.

Jive Communications

May 2018 - Aug 2018

Software Developer Intern (Montreal, Qc)

- Ported AGI (call routing tool) from virtual machines to containers. AGI application was coded in **Java** and the tool used for containerization was **Docker** and **Kubernetes**.
- Developed the new voicemail transcription feature. The application was coded in **Go**, used **Google's Speech** as the speech-to-text application, containerized using **Docker**, and **Kafka Apache** as temporary storage for messages.
- Developed a tool to create load tests for the voicemail transcription. This tool was made using **Go**, **Bash** and **Docker**.
- Modified the deployment tool of the application which routes calls of the product. The application used to be running on VM, but is now running using **Docker**. Tool used **Groovy** to automate the process.

Ericsson

May 2017 – Dec 2017

Software Developer Intern (Montreal, Qc)

- Developed mobile interface and frontend for an Internet of Things (IoT) platform which monitors home and neighbourhood security. Worked with **Ionic** to facilitate cross-platform development.
- Improved overall architecture of application using **Flask** and **MongoDB**.
- Deployed machine learning in facial recognition to detect potential dangers of break-ins using **OpenCV** and **Tensorflow**.

OTHER PROJECTS

2019 Nov	<p>Reproducibility Challenge of a NeurIPS paper, final project for a course</p> <ul style="list-style-type: none">- At the discretion of students, the final project of verifying results of a published paper was allowed to be a NeurIPS paper and students could enter the Reproducibility Challenge.- Following the ablation track, my team and I verified the sensitivity of parameters published in a paper. (Link which includes our paper, the code repository, the run data, and the original paper)- Original paper explored the success of unsupervised learning of the representation of states for multiple atari games.
2019 Nov	<p>Parallelized CNN from scratch in C++, final project for a course</p> <ul style="list-style-type: none">- Implemented a CNN from scratch as final project for a parallelization course fully in C++.- Parallelization was achieved using the CUDA library.
2018 Oct	<p>GIF Sentiment Analysis with McGillAi, student run organisation</p> <ul style="list-style-type: none">-Worked with team on project to recognise emotion in a GIF (small video).-Application being built in python and uses machine learning libraries such as Keras, Tensorflow, and PyTorch.-Using the MIT GIFGIF media lab data as dataset for project and relies on deep learning.
2018 Jan	<p>Ai Tetris Player at Conuhacks, Hackathon</p> <ul style="list-style-type: none">-Built a Tetris player in Python and Javascript using Flask which hosts the player-Used Python tensorflow to build Ai to play the game
2017 Nov	<p>Accident Predictor at Code Jam, Hackathon</p> <ul style="list-style-type: none">-Team lead on developing project which would anticipate accident rates in Montreal.-Application helps predict accident probability based on time and weather conditions on roads.
2017 Jan	<p>Face descriptor at McHacks, Hackathon</p> <ul style="list-style-type: none">-Worked on an application that could create a description of a newly seen face.-Description of new face based on similarity to trained faces using Microsoft's Face API.

TECHNICAL SKILLS

Programming Languages	Python – Julia – C – C++ – Bash – GO - Java –
Libraries & Frameworks	JavaScript/Node – Html/CSS
Tools	PyTorch– OpenCV – Tensorflow – Keras – MongoDB –
Spoken Languages	Flask – Ionic – React
	Git – Docker – Kubernetes
	English, French; full professional proficiency for both

EDUCATION

2020 - (2022)	University of Montreal (MILA), Ms Computer Science, AI specialization CGPA: 4.3/4.3
2016 - 2020	McGill University, B. Eng in Software Engineering CGPA: 3.5/4.0
2014 - 2016	John Abbott College, Diploma of College Studies (DCS)
2009 - 2014	College Sainte-Anne, High School Diploma

ACADEMIC DISTINCTIONS

Fall 2017 - Present	Golden Key Member, membership requiring to be in top 15% of your program
Fall 2015 & Winter 2016	Honour Roll in Honour Sciences at John Abbott College

REFERENCES

Available upon request