# GUILLAUME LAM

guillaumelam.com
github.com/GuillaumeLam

## PROJECTS

June 2021 - Present

**Hebbian Liquid State Machine trained with RL**, project w/ **MILA**
- Investigation of combination of biological learning rules with the RL setting for dynamic patterns learning
- Spawned the package: **LiquidStateMachine.jl**

2019 Nov

**Reproducibility Challenge** of a **NeurIPS pape**r, final project for a course
- 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.

## WORK EXPERIENCE

**MILA**

June 2021 - Present

**Research Intern** (Montreal, Qc)
- Supervised by Dr. Rish

**Ormuco**

May 2019 - Aug 2019

**Software Developer Intern** (Montreal, Qc)
- Developed algorithms for closed-loop & self-healing environments in **Python**.
- Implemented new services and calls for the backend using **Flask**.
- Developed new features for the frontend using **React**.

**Jive Communications**

May 2018 - Aug 2018

**Software Developer Intern** (Montreal, Qc)
- Ported main service from virtual machines to containers using **Docker** and **Kubernetes**
- Developed the new voicemail transcription feature in **Go** using **Google's Speech**.

- Developed voicemail load testing tool using **Go**, **Bash** and **Docker**.
- Improved deployment tool of application

**Ericsson**
May 2017 – Dec 2017 **Software Developer Intern** (Montreal, Qc)
-Developed mobile interface for an Internet of Things (IoT) platform monitoring home and neighbourhood security using **Ionic**.
-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**.

## TECHNICAL SKILLS

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|---|---|
| **Programming Languages** | Julia – Python – C – C++ – Bash – GO - Java – JavaScript/Node – Html/CSS – Perl |
| **Libraries & Frameworks** | PyTorch– Tensorflow – OpenCV – Keras – MongoDB – Flask – Ionic – React |
| **Tools** | Git – Docker – Kubernetes |
| **OS** | (Li/U)nix – Windows – Mac |
| **Spoken Languages** | 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

## 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