Raphaël Christin

EDUCATION

McGill University Sep 2019 – May 2022

Bachelor's of Arts & Science

- Major: Honours Cognitive Science, Minor: Computer Science, 3.67/4.00 GPA.
- Relevant Coursework: Algorithms and Data Structures, Software Design, Al, Applied ML, Computational Linguistics.

SKILLS

Languages: Python, Java, Ruby, HTML, CSS, Javascript, MATLAB, C

Technologies: Ruby on Rails, Pandas, Scikit-learn, Numpy, TKinter, Git, LaTEX

EXPERIENCE

Research Assistant Sep 2021 – Apr 2022

Flores Lab (PI: Prof. Cecilia Flores)

Montréal, QC

- Automated control group schedule generation for mice in the chronic social defeat stress paradigm.
- Used Pandas, TKinter, and Python to develop a GUI tool to be used by a lab of 10 people.
- Can save 30 min of work per experiment.

Research Assistant Sep 2020 – Apr 2021

Biosignal Interaction and Personhood Technologies lab (PI: Prof. Stefanie Blain-Moraes)

Remote

- Investigated the effects of using different graph generation and thresholding methods from EEG recordings applied to the analysis of consciousness.
- Used MATLAB and Compute Canada servers to perform the analysis.

PROJECTS

fashion-MNIST Neural Network Classifier

- Implemented a multi-layer perceptron (MLP) from scratch using Numpy and a CNN using Pytorch to classify the fashion-MNIST dataset.
- In a **team of 3**, compared different architectures and hyperparameters to improve performance of both models. Achieved a test accuracy of **88%** for the MLP, and **91%** for the CNN.

Simplified Go Al Agent

• Implemented an agent using **Monte-Carlo tree search** to play a simplified version of Go in a tournament against other students. Achieved a **99%** win rate against a random agent.

Twwitter

 Used Ruby on Rails, HTML, and CSS to implement a minimal version of Twitter with posting, editing, timeline, and authentication.

ACTIVITIES

Computer Science Undergraduate Society Helpdesk

Jan 2021 - Apr 2022

Tutor

• 90 hours of tutoring undergraduate students in total.

McGill University Ultimate Team

Sep 2020 – Dec 2021

Co-Captain

- Helped organize a team of 23 players for competitions, including the Canadian University Ultimate Championships.
- Effectively communicated with a diverse group of players, coaches, and tournament officials.

AWARDS