

EDUCATION
APPLIED DATA SCIENCE:
MACHINE LEARNING
EPFL EXTENSION SCHOOL
2020 – 2020

MSc in NEUROSCIENCES Grade: 5.52 UNIVERSITY OF GENEVA 2017-2019

BSc in PSYCHOLOGY UNIVERSITY OF LIEGE 2013-2016

SKILLS

TECHNICAL SKILLS

Python 3 • R • Docker • MySQL • SQLite • Matplotlib • Seaborn • Numpy • Pandas • Scikit-learn • Machine Learning (KNN, SVMs, Random Forest) • Deep Learning (Multilayer, CNN) • TensorFlow 2x • Keras • PyTorch • Deep Reinforcement Learning (DQN, DDPG, HER, PPO, TD3) • Slurm • PyTest & Unit testing

SOFT SKILLS

Communication – 4 years as a scoutmaster, supervising 60 children

Teamwork - team manager in an interdisciplinary team composed of researchers, teachers, engineers

Continuous learner

LANGUAGES

French (native) • English (working proficiency) • Spanish (limited working proficiency)

XAVIER LINCE

GitHub • LinkedIn • Website

+32495735775 • xavier.lince@gmail.com • Europe/Remote

TECHNICAL PROJECTS

CATS VS DOGS CLASSIFIER WEB APPLICATION - Github

- CNN model with 98% accuracy
- Integrated into a flask application
- Dockerized and deployed via Heroku
- Written according to best practices with Black formatter

DEEP REINFORCEMENT LEARNING - Github

- Learned SOTA models to begin project
- trained models on cluster with slurm

PREDICTING AUTISM WITH BEHAVIOURAL AND fMRI DATA

- Github
- Created and defended as Capstone project for the EPFL
- Learned different MRI analysis python framework

WORK FXPFRIFNCF

DEEP REINFORCEMENT LEARNING INTERNSHIP Supervised by Dr. Solange Denervaud

2021-2022

As beginner in the field of DRL, I learned and implemented all models by myself to start the project which aims at testing different kinds of feedbacks given to the agent to assess their learning performance.

SNF SCIENTIFIC COLLABORATOR

Scientific collaborator on creativity for the SNF Spark initiative at University of Teacher Education (Valais)

2020-2021

Managed research project on creativity and brainstorming techniques • Conducted traditional and digital brainstorming sessions with groups of students • Design, development and testing of a digital brainstorming tool in collaboration with the HE-ARC for the SNSF Spark it initiative.

GRADUATE RESEARCH ASSISTANT

Supervised by Prof. Didier Grandjean and Dr Damien Benis (NEAD Lab)

2017-2019

Clarified and refined a research question following rigorous review of the current literature on memory • Conducted recruitment and data collection using standardised tests and EEG • Analysed behavioural data on RStudio, Analysed EEG data on MATLAB • Redacted the thesis "Testing the Efficacy of the Mind Palace" (final grade:6).

INTERNSHIP @CONNECTOMICS LABORATORY Supervised by Prof. David Sander (E3 Lab) and Dr. Solange Denervaud

2019

Realisation of Independent Component Analysis on fMRI datasets in MATLAB to assess if the school environment impacts the development of differences in connectivity between brain regions.