

Education

PhD in Computer Science - ETH University <i>ETH AI Center - Swiss Federal Institute of Technology</i> Explainability techniques for Graph Neural Networks	Zurich, SWITZERLAND 2021–2024
MSc in Environmental Sciences – ETH University <i>Swiss Federal Institute of Technology</i> Main coursework includes Climate Policy, Quantitative Policy Analysis and Modelling, Power market, Carbon mitigation, Geospatial Data Management and Analysis - Additional courses in CS: Statistical Learning Theory, Design of Parallel and High-Performance Computing	Zurich, SWITZERLAND 2019–2020
MSc in Computer Science – Ecole Polytechnique <i>One of France's top universities for science and engineering</i> Main coursework includes Computer Science, Applied Mathematics, Economy, Physics GPA : 3,81	Palaiseau, FRANCE 2016–2019
Preparatory Program – Lycée Henri IV <i>Intensive undergraduate-level curriculum in advanced Mathematics and Physics, leading to competitive entrance examinations to the Grandes Ecoles</i>	Paris, FRANCE 2014–2016
High School Baccalaureate in sciences – Lycée Henri IV <i>Awarded with highest honors</i>	Paris, FRANCE 2014

Research Work

Master Thesis <i>OneForest: Towards a Global Species Dataset</i> Use Graph Neural Networks based on message passing with cross-graph attention and Optimal Transport with Sinkhorn distance for link prediction <i>Python/Pytorch environments</i>	ETH Zurich June 2020–January 2021
Scientific Project <i>Prediction of Probability Distributions for Fires extent with Mixture Density Networks</i> Development of a Deep Learning program that predicts parameters to a probability distribution that reflects the distribution of burned areas in Western United States. <i>Python/TensorFlow environments</i>	Columbia University March–August 2019
Scientific Project <i>Detection of Luronium Natans with Machine Learning</i> Development of a Machine Learning program embedded in a drone, that allows for detection of endemic plants. <i>Matlab/Python/TensorFlow environments</i>	Ecole Polytechnique September 2017–March 2018
Research Project <i>KeysOfSucces, typing tutor online</i> Implementing a Web Page to teach online fast typing. <i>HTTP/Javascript/PHP/CSS</i>	Ecole Polytechnique November–December 2017
Undergraduate project <i>Paper Recycling</i> Paired work on the improvement of the chemical process of paper recycling and on the development of computer simulations of paper balls' movement in a centrifuge.	Lycée Henri IV September 2015–June 2016

Internship Experience

Facebook AI Center <i>Research Internship</i> Learning to increase the decoding accuracy for efficient vector indexing.	Paris, FRANCE May–September 2021
Technology and Innovation Center, DAIKIN <i>Assistant Engineer Internship</i>	Osaka, JAPAN June–September 2018

- Implemented a program to predict Power consumption of Air-conditioning systems
- Developed thermodynamical models for thermal transfers in a Building
- Optimized the empirical and theoretical Loads of AC systems to predict building's specific parameters

Python environment

Sino-French Institute of Nuclear Engineering and Technology

Zhuhai, CHINA

Teaching Assistant

October 2016–May 2017

Gave tutorials in physics and mathematics to Chinese students in their final year of bachelor degree.

French Armed Forces – Officer Cadet

La Creuse, FRANCE

Leadership training

September–October 2016

Part of Polytechnique's first year curriculum

Tante Emma Laden Grocery Store

Paris, FRANCE

Internship in Sales and Management

February 2011

Computer skills

Intermediate: \LaTeX , HTML/CSS/PHP, OpenOffice, Linux, OpenCV

Advanced: Python, R, C/C++, JAVA, MATLAB

Languages

Fluent: French, English, German (C1)

Intermediate: Spanish, Japanese

Interests

- Swimming

- Hiking

Publication – Honors

Scientific Paper

Vancouver, Canada

AAAI Conference in Artificial Intelligence - AI for Social Impact Track

February 2022

Reducing the Overestimation of Forest Carbon with Deep Learning and Aerial Imagery

Proposal

San Diego, USA

KDD 2020 Conference - Fragile Earth Workshop

August 2020

OneForest: Towards a Global Species Dataset by Fusing Remote Sensing and Citizen Science Data with Graph Neural Networks

Scientific Paper

Published in the review Geophysical Research Letters

August 2019

Learning Fires: How Neural Networks are used to parametrize conditional distribution of Extreme Events

Scientific Paper

Published in the internal review of DAIKIN Ind.

August 2018

Optimization of Building Parameters by Matching Empirical and Theoretical AC Heat Loads: First Steps with Regression Machine Learning and Curve Fitting

Concours General of French and Latin

Paris, FRANCE

A national competition reserved to 12th grade students

May 2014