

Ayoub GHRISS

@ ayoub.ghriss(at)colorado(dot)edu +1(720)-323-43√815 aghriss.github.io FR, MA

EDUCATION

University of Colorado, Boulder Jan 2019- 2024
PhD Candidate, Machine Learning
• Advisor: Claire Monteleoni
• Unsupervised Learning: Deep Representation Learning (Spectral Representation, Embedding)

ENS Cachan Oct 2017- Sept 2018
Master of Research Mathematics, Vision and Machine Learning (MVA)
• Reinforcement Learning, Probabilistic Graphical Models, Statistical Learning
• Computer Vision, Deep Learning, Speech Recognition, Audio Signal Processing

Ecole Polytechnique Sept 2014-Sept 2017
Applied Mathematics
• Polytechnician Engineer Cycle with Major in Applied and Computational Mathematics.
• Stochastic Calculus for Finance, Simulation and Monte-Carlo methods, Advanced Machine Learning, Random Models for survival and ecology.

ENSAE ParisTech Sept 2013-June 2014
B.Sc. Economics and Applied Mathematics
• Data Analysis, Econometrics, Microeconomics, Macroeconomics

WORK EXPERIENCE

Software Engineer, PhD Intern June - August 2020
📍 [Google, Boulder](#)
• Deep Learning for air quality prediction using satellite imagery (Earth Engine)

Machine Learning Researcher, Internship April - September 2018
📍 [RIKEN Center, Advanced Intelligence Project, Tokyo](#)
• Deep Hierarchical Reinforcement Learning, Spectral Framework for Option Learning

Quantitative Researcher, Internship April - August 2017
📍 [Mazars, London](#)
• Implemented a Martingale Hypothesis Control on an Economic Scenario Generator using C++.
• Reviewed and implemented models of counter-parties probability of default for an IFRS9 tool.

Market Data Analyst, Internship June - August 2016
📍 [Société Générale, Paris](#)
• Developed a VBA tool to control of Guaranteed Repos for Paris' trading team.

PROJECTS

Variance Forwards Model and Volatility Derivatives Sept 2016- March 2017
[Department of Applied Mathematics , Ecole Polytechnique](#)
• Studying Bergomi and Rough Bergomi Models for volatility swaps.

Optimization of EDF's technicians circuit in France June 2015 - May 2016
[EDF](#)
• Worked on developing a JAVA application. In charge of mathematical modelling and exploring open source solutions.



SKILLS

Python C/C++ Matlab VBA Java PHP Machine Learning Algorithmics Statistics Photo Editing

LANGUAGES

Arabic Native
French Native
English Fluent
Japanese Elementary proficiency

EXTRACURRICULARS

 **X-MicroFinance Club**
Consulting for Safran cooperatives in Taliouine, Morocco
 **X On the MUN Club**
Debating Club. Head Delegate, Bonn Model United Nations 2015