# **Ayoub GHRISS**

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FR, MA

### **EDUCATION**

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**

Polytechnicien Engineer Cycle with Major in Applied Mathematics and application in Finance.

 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**

## Machine Learning Researcher, Internship

April - September 2018

**♀** RIKEN Center, Advanced Intelligence Project, Tokyo

• Study and implementation of Supervised and Reinforcement Learning in high-dimensional and continuous framework.

### Quantitative Research Intern

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 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.

An inbound call forecasting system Sept 2016- December 2016

**AXA Data Challenge, Data Science and Mining Team** 

• Predicting the number of incoming calls for the AXA call center in France, on a per half-hour time slot basis.

Optimization of EDF's technicians circuit in France

June 2015 - May 2016

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