# REDA OUHAMMA

PhD student at University of Lille - Team Scool (ex SequeL) https://github.com/redaouhamma  $\diamond$  reda.ouhamma@polytechnique.org  $\diamond$  (+33) 779-592-191

## **EDUCATION**

#### PhD student: Inria Lille

October 2019 - Present

- · Online learning with provable guarantees / Multi-armed bandits
- · Paper "Learning value functions in deep policy gradients using residual variance" in ICLR 2021
- · Paper on stochastic online linear regression under review for Neurips 2021
- · Paper on thresholding bandits under review for Neurips 2021

## M.Sc. MVA - ENS Paris-Saclay

September 2018 - August 2019

· M2 Mathematiques, Vision, Apprentissage. Coursework: Probabilistic Graphical Models, Deep Learning, Reinforcement Learning and Convex Optimization

## Engineering degree and M.Sc. - Ecole Polytechnique

2015 - 2019

· Leading French *Grande Ecole*. Coursework: Probability and Statistics, Computer Science, Operations Research and Machine Learning.

## Preparatory Classes - Lycee Moulay Youssef, Rabat

2013-2015

#### RESEARCH EXPERIENCE

## Research internship - Inria-SequeL

04/2019 - 07/2019

Non-stationary Multi-armed bandits for medical applications.

## Master's project

11/2018 - 01/2019

Image-to-Image Translation with Conditional Adversarial Nets and Cycle-Consistent Adversarial Nets.

#### Master's project: R&D of EDF Paris-Saclay

11/2017 - 04/2018

Optimized pricing of electricity for an electricity network operator using interior points methods.

#### Bachelor's project: Mapping Drones

10/2016 - 05/2017

#### **SKILLS**

Programming Languages Software & Tools Python (Proficient), C++, R, Java

Keras, PyTorch, LaTeX, Excel, Linux, Mosek: C/Python APIs

## WORK EXPERIENCE

#### Quant Researcher Intern - Squarepoint Capital

April - August 2018

· Extended existing model for QP optimizations to a larger class: Conic convex problems

## Indexer Intern - Societe Generale

June - August 2017

· Developed trading strategies on futures using Time series analysis techniques

#### AWARDS AND INTERESTS

Excellence scholarship - French ministry of foreign affairs 3rd place in "Le Challenge franco-marocain de l'entrepreneuriat" Drone enthusiast / Rowing / Debating