# **CHARLES OUAZANA**

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#### **EDUCATION**

École des Mines Saint-Etienne, France

Master of Science; GPA 4.06/4.33

2019 - 2023

- Coursework: Advanced Probability and Statistics, Machine Learning, Data and Time Series Analysis, Mathematical Exploitation of Numerical Simulators, Optimisation, Random Modeling, Partial Differential Equations, Micro-Economy, Econometrics
- Projects: 

  Insect identification using fine-grained classification and segmentation 

  Nuclear medicine image synthesis using deep learning particularly U-Net and GAN  $\square$  Hurricane forecasting using AI on time series and satellite data  $\square$  Trading algorithm based on technical analysis and AI on order book data using RNN
- Societies: Founder and President of Chess Mines, the chess society, and organisation of an inter-school tournament

Université Jean-Monnet Saint-Etienne, France

Bachelor of Sciences; GPA 4.0/4.0

*2020 - 2021* 

Coursework: Measure Theory, Probability, Complex Analysis, Differential Calculus, Topology and Numerical Analysis

Lycée Fénelon Paris, France Classes Préparatoires aux Grandes Écoles *2016 - 2019* 

• Coursework: Mathematics, Physics, Computer science, Engineering Philosophy, Chemistry

#### WORK EXPERIENCE

### **Capital Fund Management (incoming)**

London, UK

Quantitative research intern

May - Oct. 2023

#### Sandbar Asset Management

Paris, France

Quantitative research intern

May - Oct. 2022

- Time series forecasting and multi-modal model implementation
- · Portfolio optimization and risk analysis
- Alternative data retrieve and analysis
- · Bloomberg API with python

## **CIEMAT (Spanish Minister of Science)**

Madrid, Spain

May - Nov. 2020

Deep learning in plasma physics research intern

Nov. 2021 – Apr. 2022

- Development of a generative model for data simulation (LSTM-GAN)
- Design of a deep learning algorithm for the detection of events in electrostatic potential time series measured in the TJ-II Stellarator (Magnetically Controlled Nuclear Fusion)
- · Programming languages: Python, Julia

LVMH Paris, France Data Analyst intern Jun. - Sep. 2021

• Analysis of Data from all Parfum Christian Dior stores and e-commerce

• Time series forecasting, Appetency score calculation using Machine Learning

Annapurna Pariwar Pune, India

Construction of a performance analysis tool for the microcredit activities and risk analysis of their assets

- Construction of a stress test for assessing the impacts of covid-19
- · Working in a team of volunteer to link microinsurance and microfinance action

France Bénévolat Paris, France Sep. 2019 - Jan. 2021 Volunteer mathematics tutor

- Free tutoring for students experiencing academic disengagement caused by covid
- Mathematics tuition for students from 10th Grade to 3rd year BSc

## SKILLS AND ACTIVITIES

Volunteer

- Programming: Python (pytorch, scikit-learn, OOP, sqlalchemy), SQL, R, Office, VBA, Bloomberg
- Languages: English, French, Spanish
- Sports: Tennis, Basketball, Skiing, Triathlon
- Interests: AI research, Financial Markets, Literature, Geopolitics, Option Trading, Online Chess (Top 1% on Lichess)
- Certifications: Stanford University online ML Course, IBM Deep Learning with Pytorch, DeepLearningAI Course