## **AYMEN QABEL**

#### MSc MVA ENS Paris Saclay/ CentraleSupélec graduate

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in Aymen QABEL Website Aymen Qabel



### **EDUCATION**

## École Normale Supérieure - University of Paris-Saclay Master of Science - MVA - Mathematics, Computer Vision, Learning

September 2021 - September 2022 ♥ Gif-Sur-Yvette, France

 Relevant courses: Convex Optimization and applications in machine learning, computer vision, Kernel methods in ML, Speech Recognition, Graphs, NLP

# CentraleSupélec - University of Paris-Saclay General Engineering/Major in Data Science

 Relevant courses: Statistics, Probabilities, Machine Learning, Optimization, Deep Learning, NLP, Computer Vision, TimeSeries, Graphical Models, Big Data.

#### University of Texas at Austin

#### Cockrell School of Engineering and College of Natural Sciences.

🛗 January 2020 - May 2020

Austin TX, USA

 Relevant courses: Data Science Principles, Structural properties of PDEs, Probability models with Actuarial Applications.

# Lycée d'excellence de Benguerir Mathematics and Physics (MP)

## September 2016 - June 2018

- Preparatory years for the competitive examination to the French "Grandes Écoles" for scientific studies.
- Advanced classes in Mathematics and Physics.

## **EXPERIENCE**

### DaSciM, LIX, École Polytechnique

#### Research Engineer: Graph neural networks, Proteins, Molecules

🛗 September 2022 - Present

• Developing Deep Learning models for Bio/ Chemistry applications.

#### DaSciM, LIX, École Polytechnique

#### Research Internship: Graph neural networks, Proteins

May 2022 - September 2022

- Structure-Aware Antibiotic Resistance Classification Using Graph Neural Networks [Paper] (Accepted at Al4Science at Neurips 2022).
- Presented a poster of my project during the Engineering For Health Conference (E4H) at École Polytechnique 2022.

#### Amadeus IT Group

#### Internship: Machine Learning, Big Data, Time Series, Hadoop, Spark

May 2021 - October 2021

Analyzed travel reservations through machine learning and created a Reservation forecasting model adapted to the COVID-19 period.

#### Institut Gustave Roussy

#### Research Internship: NLP, Deep Learning, Transformers

🛗 October 2020 - April 2021

• Created "KmemBERT", a Transformers-based model for estimating cancer patients' survival time trained on French medical records.

#### **PROJECTS**

# Automatic Speech Recognition Deep Learning, ASR, Self-Supervised Learning

₩ April 2022

**♀** Gif-Sur-Yvette, France

 Fine tuned Self-Supervised Learning pre-trained models on APR (Automatic Phoneme Recognition) and ASR (Automatic Speech Recognition) in a crosslanguage setting.

## Classification of Lymphocytosis from Blood Cells

#### Computer Vision, Deep Learning, CNNs

February 2021

 Experimented computer vision architectures (ResNet, EfficentNet, Inception) to deal with multi instance labeling problem of classifying lymphocytosis from blood cells.

### Music Genre Classification Machine Learning

Austin TX. USA

 Designed a music classification model that can predict the genre of songs from a 30 second sound clip extracted from within it using supervised and unsupervised learning. [Medium Article]

### **ACHIEVEMENTS**

- 1st in Moroccan Scientific Baccalaureate Exam
- French Government Scholarship
- Top 2% students in Moroccan Engineering schools entry exam (Concours National Commun Ranking 2018)

## **LANGUAGES**

Arabic: Native French: Fluent

English: Fluent (TOEFL: 110/120)

## **SKILLS**

Python, Pytorch, Tensorflow, Pandas, Matlab, R, Scala, Git, Spark

## **EXTRA-CURRICULAR**

#### Boxing Club of CS

Vice president of the Boxing Club of Centrale-Supélec

Organization of CS WARRIOR, an inter-university boxing competition