# **Mohamed** El Baha

## Data Scientist - AI Researcher

nohamed.github.io im mohamedELBAHA

■ elbahamohamed@gmail.com 🔰 +33628585711

### PROFESSIONAL EXPERIENCE

MICHELIN | DATA SCIENTIST

April 2022 - Now | Clermont-Ferrand, France

→ Developing uncertainty quantification methods in predictive machine learning models Developing model validation processes to take better decisions.

Python - Tensorflow - Git - Bayesian Models

LIMSI DATA SCIENTIST

May 2021 - September 2021 | Paris, France

→ Implemented Machine learning algorithms related to Eye Gaze movement and speech, Tensorflow • Keras • Pytorch • to predict the score of English tests. Deployed these algorithms via a Python interface. Python - PyQt5 - HMM - CNN - SVMs

**ORANO TN** | CONSULTANT

September - December 2020 | Montigny-le-bretonneux, France

→ Managing a group of 5 engineering students to realize a benchmark on the measurement of the performance of engineering processes. |KPIs

### **EDUCATION**

IMT ATLANTIQUE | M.Eng - Mathematical and computational engineering August 2019 - September 2022 | Brest, France

Courses: Machine learning - Deep learning - Operational research - Optimization -Numerical Methods - Stochastic Dynamic Modeling - Data Science.

**UNIVERSITY OF WESTERN BRITTANY** | B.Sc Pure Mathematics | GPA = 4.0

August 2017 - September 2019 | Brest, France

Highly selective program - Courses : Calculus, Statistics, Complex Analysis, Algebra.

### RELEVANT PROJECTS (MORE PROJECTS ON MY PORTFOLIO)

TRANSFORMERS FOR MULTI-ORGAN SEGMENTATION IN ABDOMINAL IMAGING | PYTORCH Implementing and comparing different Deep Learning model architectures for image semantic segmentation task (Transformers, CNNs, Hybrid Models)

PREDICTION OF EARTH TEMPERATURE USING CLOUD COMPUTING TOOLS | BIGQUERRY, GCP Manipulate large Dataset and apply statistical and Machine Learning methods to predict earth temperature of given coordinates.

TEXT CLASSIFICATION OF BBC NEWS DATASET | TENSORFLOW, NLP, LSTM, PCA, TSNE Given a text from the news, we implemented models to predict in which topic it belongs (technology, business, sport, entertainment or politics).

SPARSITY AND PATCH FOR HYPERSPECTRAL IMAGE RESTORATION PYTORCH, AUTOENCODERS Restore a hyperspectral image using a Learning Based approach.

TRANSFER LEARNING FOR NLP WITH TENSORFLOW HUB USING BERT MODEL PYTHON, TF Fine Tune different Models to detect insincere questions from Quora database.

### **PUBLICATIONS**

### SKILLS

Adaptability • Business Mindset • Team Player • Curious • Rigorous • Storytelling

#### **PROGRAMMING**

Python • R • Java • SQL • LATEX

#### LIBRARIES/FRAMEWORKS

Pandas • Scikit • XGBoost • Seaborn Plotly

#### TOOLS/PLATFORMS

Git • GitLab • VS Code • Docker • Kubernetes

### LANGUAGES

FRENCH • Bilingual ARABIC • Native ENGLISH • Advanced C1

#### **CERTIFICATIONS**

Deep Learning Specialization DeepLearning.ai

Tensorflow Developer Certificate

**GANs Specialization** Coursera

Probabilistic Deep Learning Imperial College London

### **INTERESTS**

- Sport (Surf, WindSurf)
- Digital Marketing, E-commerce
- Kaggle Competitions.

#### REFERENCES

Olivier Augereau, Al Researcher Director of CERV Osaka, Japan / Brest, France □ augereau.o@gmail.com

A System for Automatic Calculation of the Eye-Voice Span, Mohamed El Baha, O. Augereau, S. Kobylyanskaya, I. Vasilescu and L. Devillers, Document Analysis System 2022