



✉ kholoud837@gmail.com

🏠 Toulouse

📅 23 years old

📞 +33 6 95 77 30 20

Languages

French Native

English Advanced

Arabic Native

Russian Basic knowledge

Soft skills

Teamwork

Problem-solving

Adaptability and flexibility

Interests

Travel

Basketball

Volunteering

References

Rémi Chauvat

Telecom Expert Engineer, Kinéis,
Kinéis
rchauvat@kineis.com

Blaise Mulliez

Manager IATI-TSE, INP ENSEEIHT,
INP ENSEEIHT
blaise.mulliez@toulouse-inp.fr

Programming skills

Programming Languages

- Python
- C/C++
- Matlab

Artificial Intelligence Frameworks

- Tensorflow/Keras
- Pytorch

LinkedIn

🌐 @kholoudhilal

Kholoud HILAL

A graduate of INP ENSEEIHT, a top-ranked French engineering school, looking for a CDI position as an Image Processing Engineer specializing in space and satellite technologies.

Image Processing Engineer graduate from INP ENSEEIHT, I possess a robust foundation in image processing and artificial intelligence, specializing in satellite and geographic data, with a strong interest in remote sensing technologies and their applications in satellite image analysis and data processing.

Work experience

Signal Processing Engineer Intern

Kinéis, Toulouse From March 2024 to September 2024

- Created a catalog of interference types from real signal spectral analysis.
- Developed and integrated 5 interference scenarios in Python into an existing simulator.
- Optimized a reception algorithm, improving the detection of useful signals by approximately 80%.

Gyroscope Data Acquisition Project

NXP, Toulouse From February 2024 to March 2024

- Developed a lightweight and portable RedPitaya gyroscopic data acquisition device.
- Stored data on an SD card in text and CSV formats.

Deep Zoom Project

Airbus Defence & Space , Toulouse From November 2023 to January 2024

- Created a labeled satellite dataset for super-resolution
- Trained and tested an AI model on this dataset
- Integrated the model into a ZCU102 development board

Optimization Tutor

INP ENSEEIHT , Toulouse March 2024

Education

Engineering program in Information Processing & Artificial Intelligence

INP ENSEEIHT , Toulouse, France From September 2021 to September 2024

- Applied nonlinear edge-preserving filters for multiscale image decomposition.
- Developed a system for recognizing characters drawn in the air.
- Developed and optimized an AI model for speech recognition to classify 12 labels from the TensorFlow Speech Recognition Challenge dataset on Kaggle.

Preparatory Classes for Grandes Ecoles MPSI/MP

Lycée Moulay Idriss, Fez, Morocco From September 2019 to July 2021

- Applied Mathematics , Physics , Engineering and computer sciences
- Developed environmental models, analyzed aerodynamic behaviors, and evaluated thermal updrafts to optimize drone performance in fire conditions.
- Received excellence scholarships from both the Moroccan and French governments.

Scientific Baccalaureate, Mathematics and Physics Option

Etablissement Al Jabr, Fez, Morocco From September 2018 to June 2019

High honors

Skills

Image Processing

- Edge smoothing
- Image Segmentation and Classification
- Medial axis
- Deconvolution and denoising
- Image compression
- Proficient in using OpenCV

AI Expertise

- Supervised and semi-supervised learning
- RNNs/LSTM
- CNNs
- Autoencoders, Transformers, and Generative Adversarial Networks (GAN)
- Data analysis

Satellite Navigation

- Estimation of position, velocity, and time (PVT)
- Correction of errors due to propagation delays
- Kalman filter for data fusion
- Estimate the position of a dynamic receiver and evaluate performance using Google Earth

Voluntary experience

Scout leader

OMSG Adarissa , Fez, Morocco Since July 2017

Organized and supervised summer camps and volunteer actions.