Amine Sehaba

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SKILLS

• Coding: Python.

- Libraries: PyTorch, PyTorch-Geometric, TensorFlow, Keras, Scikit-Learn.
- Skills: Machine Learning, Deep Learning, Computer Vision, Graph Neural Networks.
- Languages: English, French, Arabic.

Experience

 LIRIS Lyon, France PhD Student Dec. 2022 - Nov. 2025

• GenH2Arch Project: Engaged in innovative architectural design research using Graph Neural Networks. Representing buildings with voxels, employing graph conditional generative models for guided design generation.

• LIRIS Lvon, France

Mar. 2022 - Sep. 2022 Research Intern

• InterFolia Project: Trained and compared various existing mobile-friendly image classification models to classify plant species using InterFolia dataset. The dataset was made publicly available on Kaggle for benchmark comparison. A paper was submitted and accepted for presentation at the CVPPA Workshop at ICCV 2023.

SalesPro Consulting LTD

Remote

Machine Learning Engineer R&D

Feb. 2020- Feb. 2022

o Private Project: Designed and proposed various solutions for running deep learning image classification models on devices with limited resources. Proposed solutions involve different combinations of multiple techniques: Knowledge Distillation, Auto-Encoder, and Early Exits. Achieved an accuracy improvement of 3%, reduced the memory size of the model by approximately 2 times, and improved the inference time.

• Aimirr Remote

Machine Learning Engineer R&D

Nov. 2021 - Jan. 2022

• AINA Project: Reviewed the state-of-the-art techniques for 3D garment generation from 2D clothing images. Compared the advantages and disadvantages of existing models documented in the literature. Selected the most suitable model for the AINA mobile application based on 3D mesh generation accuracy and inference time.

ASTROLAB-AGENCY

Sousse, Tunisia

Data Science Intern

Aug. 2019 - Oct. 2019

o Online Interview Platform: Proposed a machine learning pipeline designed to extract soft skills from recorded video interviews. Utilized speech-to-text conversion to extract text from the recordings, followed by classification using classical machine learning algorithms.

PUBLICATIONS

• El Amine, S. M., Carlos, C. J., Laure, T. R. (2023): 'Embedded plant recognition: a benchmark for low footprint deep neural networks.' Proceedings of the IEEE/CVF ICCV Workshops, 2023, pp. 670-677.

EDUCATION

• University Lumiere Lyon 2

Lyon, Fance

PhD Student in Artificial Intelligence

Dec. 2022 - Nov. 2025

• Clermont Auvergne University

Clermont Auvergne, France

Master's degree in Development, 3D, and Artificial Intelligence

Sep. 2021 - Aug. 2022

• Istanbul Technical University

Istanbul, Turkey

Erasmus Mobility in Computer Engineering Department

Feb. 2019 - Jun. 2019

• Oran University of Science and Technology - Mohamed Boudiaf

Oran, Algeria Sep. 2017 - Jun. 2019

Master's degree in Artificial Intelligence and its Applications

• Oran University of Science and Technology - Mohamed Boudiaf

Oran, Algeria Sep. 2014 - Jun. 2017

Bachelor's degree in Computer Science