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Websites

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in yacine bouaouni

Honors

Winner of IDEX Excellence Scholarship 2021

Skills

Python Pytorch, Tensorflow, Jax, OpenCV, scikit-learn, Flask, SQLAlchemy.

C and C++ OpenCV, PCL, Eigen.

Databases MongoDB, BigQuery, SQL.

Matlab & Simulink

Linux

Git & Github

Google Cloud Platform

Freelance

Machine Learning and Computer Vision Top Rated Freelancer - Upwork

Personal Projects

Facial landmark detection with Deep Learning using Pytorch.

Image captioning with Deep Learning using Pytorch.

Hackathons

UmohaHack Africa Financial Resilience Challenge.
Ranking: 24/463

UmohaHack Algeria Time to arrival estimation using Machine Learning.
Ranking: 3/81

Extracurricular Activities

Calculus Teacher Oct 2019 - Feb 2020

Member of IEEE student branch Algeria. Feb 2020 - Dec 2020

Business English - Berlitz Jan 2020 - Mar 2020

Languages

English TOEFL IBT 102/120

French TCF level C2

Arabic Native

M. Yacine BOUAOUNI

Machine Learning Research

Publications

Driving-Pattern Identification and Event Detection Based on an Unsupervised Learning Framework: Case of a Motorcycle-Riding Simulator. *M.Y.Bouaouni, R.Ait Ali Yahia, A.Boubezoul.* - *IEEE Access*. DOI: [10.1109/ACCESS.2021.3130400](https://doi.org/10.1109/ACCESS.2021.3130400)

Education

MSc Mathematics, Vision, Machine Learning (MVA)

Since 2021 **École normale supérieure Paris-Saclay** Paris

Courses: Advanced Deep Learning, Image Denoising, Digital Imaging, Computer Vision, 3D Vision, Audio Signal Processing, Reinforcement learning, Optimization for ML, Learning for Time Series, Graph ML.

Engineering Degree in Electronics and Master in Telecommunication.

From 2016 to 2021 **Ecole Nationale Polytechnique** Algiers

Courses: Signal and image processing, information theory, estimation theory and machine learning.

GPA: 3.9/4.0 Ranking: 1/23 (Engineer cycle) and 1/307 (Preparatory classes).

Computer Vision Nanodegree.

2020 **Udacity - Nvidia** (Online)

National Access Competition to Engineering Schools (Grandes Ecoles).

From 2016 to 2018 **Preparatory Classes - Ecole Nationale Polytechnique** Algiers

Field: Science and technology. **Ranking:** 6/1338

Experience

Machine learning & Image Processing Research Intern

From April 2022 to September 2022 **GoPro** Paris

- Conduct a research on deblurring models based on deep learning.

Research Intern Hybrid Deep Learning Based Speech Source Separation

From February 2021 to July 2021 **Ecole Nationale Polytechnique** Algiers

- Development of an algorithm based on auto-encoders and deep unfolding techniques for source separation in the time-frequency domain.

Research Intern Riding Patterns Identification based on unsupervised learning framework

From June 2020 to February 2021 **Laboratory SATIE** Paris

- Develop an unsupervised framework to analyze the risk incurred by motorized two-wheeler drivers' maneuvers by recognizing trajectory patterns using sensory time series data.

Computer Vision Intern - Time to collision estimation using monocular cameras

From September 2020 to October 2020 **Ecole Nationale Polytechnique** Algiers

- Conduct a comparative study of image descriptors and improve feature matching performance using approximate nearest neighbor methods for TTC estimation.

Computer Vision Intern - Scene Understanding for Autonomous Vehicles.

From July 2020 to September 2020 **Ecole Nationale Polytechnique** Alger

- Develop a solution for obstacle tracking using Kalman filters and 3D segmentation in c++.

Computer Vision Intern - Segmentation and classification of satellite images.

From October 2019 to December 2019 **Signal and communication laboratory (ENP)** Algiers

- Build a deep learning model to segment cloud organization patterns from satellite images.

Supervised Projects

Distinctive Local Deep 3D Descriptors

From February 2022 to March 2022 **ENS Paris-Saclay** Paris

Auxiliary Classifier GANs for Image Generation

From December 2021 to February 2022 **ENS-Paris Saclay** Paris

Self-supervised Learning for Image Restoration

From December 2021 to January 2022 **ENS-Paris Saclay** Paris

Deep Denoising with Non-local Terms

From December 2021 to January 2022 **ENS-Paris Saclay** Paris