

Nguyen Anh Minh MAI

AI Research Engineer · Computer Science Major · IRIT, CNRS
🏠 Paris, France 📞 +33(0)758555539 ✉ mainguyenanhminh1996@gmail.com
📄 nguyen-anh-minh-mai 🌐 maiminh1996.github.io 🗣 maiminh1996 📝 Blog

About Me

Knowledge: Machine Learning, Deep Learning, Image Processing, Computer Vision, 3D Vision (camera & LiDAR).

Programming Languages: Python, C++, C, CUDA, Bash, SQL, HTML, CSS, Javascript.

Frameworks: Pytorch, TorchScript, Keras, TensorFlow, TensorFlow Lite, OpenCV, Scikit-learn, NumPy, SciPy, Pandas, TensorRT, PCL.

Developer Tools: git, docker, cmake, ROS, Qt, SuperPOD, tmux, vim, VS Code, Doxygen, L^AT_EX.

Operating Systems: Unix (essentially), Windows.

Languages: French (Fluent), English (Fluent), Vietnamese (Native).

Working Experiences

IRIT, CNRS & Cerema & Easymile

Nov. 2019 – Jan. 2023

Researcher

Toulouse, France

- Focusing on LiDAR-based/ camera-based 3DOD methods, Data synthesis, Adverse weather conditions.
- Keywords: 3D object detection, Tracking, Segmentation, LiDAR, Linux, PyTorch.

VinAI Research

May 2021 – Dec. 2021

Research Scientist

Vietnam

- Designing & implementing a LiDAR-based 3DOD on waymo challenge, nuscenes datasets. Benchmark on waymo 🌐
- Training & evaluating on our own large-scale datasets. Exporting & deploying the model on car products.
- Localization and mapping for navigation, Fast LOAM
- Keywords: 3D Object Detection, LiDAR, Linux, C++, CUDA, PyTorch, TorchScript, TensorRT, Embedded Systems, ADAS, SLAM.

CEA List – LVA

Feb. 2019 – Aug. 2019

Research Engineer Intern

Paris-Saclay, France

- Fine detection and recognition of large-scale products using the 3D sensor Realsense d435.
- Targeted TensorRT optimization for embedded platforms Nvidia Jetson tx2, AGX Xavier.
- Keywords: 2D Object Detection, Linux, PyTorch, TorchScript, TensorRT, Embedded Systems.

MIA

Apr. 2018 – Jul. 2018

Research Engineer Intern

La Rochelle, France

- Reimplementing the SOTA 2DOD (YOLO v3) in TensorFlow.
- Training & evaluating on our own datasets. Exporting & deploying the model on Raspberry PI 3/ TurtleBot 3
- Keywords: 2D Object Detection, Linux, TensorFlow, TensorFlow Lite, Embedded Systems.

Education

Paul Sabatier Toulouse III

2019 – 2022

Ph.D. in Computer Vision

Toulouse, France

INSA Centre Val de Loire

2014 – 2019

M.Sc. (Diplôme d'Ingénieur) in Electrical Engineering

Bourges, France

Publications

- 3D Object Detection for Self-Driving Cars Using Video and LiDAR: An Ablation Study, SENSORS, 10.3390/s23063223 2023
- Camera and LiDAR Analysis for 3D Object Detection in Foggy Weather Conditions, ICPRS, 10.1109/ICPRS54038.2022.9854073 2022
- Multimodal Sensor Fusion for 3D Object Detection for Autonomous Driving, (poster) ITS European Congress 2022
- 3D Object Detection with SLS-Fusion Network in Foggy Weather Conditions, SENSORS, 10.3390/s21206711 2021
- Détection d'Obstacles par Vision et LiDAR par Temps de Brouillard pour les Véhicules Autonomes, ORASIS, hal-03241464 2021
- Sparse LiDAR and Stereo Fusion (SLS-Fusion) for Depth Estimation and 3D Object Detection, ICPRS, 10.1049/icp.2021.1442 2021

Scholarship, Awards & Additional Experiences

Best paper honorable mention, ICPRS 2021	2021
PhD research scholarship, Cerema Research Center, France	2019
2nd prize in math (provincial competition of the best high school students), Hue, Vietnam	2014
2nd prize in math (provincial competition of the best college students), Hue, Vietnam	2011
3rd prize in math on pocket computer (provincial competition of the best college students), Hue, Vietnam	2010
Reviewer for ICPRS (2023), BMVC (2022), AJAI (2022), Neurocomputing, Springer Nature	2022
Teaching assistant for Reinforcement Learning Virtual School (RLVS), ANITI Toulouse, France	2021
Teaching: Introduction to Programming and Algorithms in Python, Paul Sabatier University (UPS), Toulouse, France	2021
Deep learning specifications Certificates & Machine learning Certificates, Andrew Ng, Coursera	2017

Referees

Dr. (HDR) Louahdi Khoudour

Head of Department STI, CEREMA

✉ louahdi.khoudour@cerema.fr

[🔗 Homepage](#)

Prof. Khoa Luu

Assistant Professor, CSCE, University of Arkansas, United States

Former leader, Applied Research group at VinAI Research

✉ khoaluu@uark.edu

[🔗 Homepage](#)

Prof. Sergio A Velastin

Visiting Professor, Queen Mary University of London

Senior Member, IEEE

✉ sergio.velastin@ieee.org

[🔗 Homepage](#)