NGUYEN ANH MINH MAI

AI RESEARCH ENGINEER · COMPUTER SCIENCE MAJOR · PAUL SABATIER TOULOUSE III

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ABOUT ME

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

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

Frameworks: Pytorch, Keras, TensorFlow, OpenCV, Scikit-learn, NumPy, SciPy, Pandas, TensorRT, Qt, ROS, PCL,

pytest.

Developer Tools: git, docker, SuperPOD, tmux, vim, VS Code, Doxygen, LATEX.

Operating Systems: GNU/Linux, Microsoft Windows.

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

EXPERIENCE

IRIT, CNRS & Cerema & EasyMile

Nov. 2019 – now Toulouse, France

Research Engineer

 \bullet Focusing on LiDAR-based/ camera-based 3DOD methods.

• 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. 80.76% mAP 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, CUDA, pytorch, tensorRT, Embedded Systems., ADAS, SLAM.

CEA 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, tensorRT, Embedded Systems.

MIA Apr. 2018 - Jul. 2018

Research Engineer Intern

Paul Sabatier Toulouse III

La Rochelle, France

2019 - 2022

2011

2010

2017

2016

2021

2018

- 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, Embedded Systems.

2nd prize in math (provincial competition of the best college students), Hue, Vietnam

Deep learning specifications Certificates, Andrew Ng, Coursera

Machine learning Certificates, Andrew Ng, Coursera

EDUCATION

Doctor of Philosophy - PhD, Computer Science	Toulouse, France
INSA Centre Val de Loire	2014 - 2019
Diplôme d'ingénieur (a parallel "Master 2" degree)	$Bourges,\ France$
Publications	
"3D Object Detection with SLS-Fusion Network in Foggy Weather Conditions," SENSORS	2021
"Camera and LiDAR analysis for 3D object detection in foggy weather," ICPRS	$\boldsymbol{2022}$
"Multimodal Sensor Fusion for 3D Object Detection for Autonomous Driving," (poster) ITS European Congress 2022	
"Sparse LiDAR and Stereo Fusion (SLS-Fusion) for Depth Estimation and 3D Object Detection," ICPRS	2021
"Détection d'obstacles par vision et LiDAR par temps de brouillard pour les véhicules autonomes," (ORASIS 2021
Additional Experience	
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

3rd prize in math on pocket computer (provincial competition of the best college students), Hue, Vietnam

Teaching assistant at Reinforcement Learning Virtual School (RLVS) hosted by the ANITI Toulouse, France

Summer school: Document Analysis and Recognition at La Rochelle University, La Rochelle, France