Nguyen Anh Minh MAI

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

↑ Toulouse, France J +33(0)758555539 \blacksquare mainguyenanhminh1996@gmail.com nguyen-anh-minh-mai 𝒮 maiminh1996.github.io \bigcirc maiminh1996 \bigcirc REFEREES

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

Research Engineer

IRIT, CNRS & Cerema & EasyMile

Nov. 2019 - now

Toulouse, France

- Focusing on LiDAR-based / camera-based 3DOD methods.
- Keywords: 3D object detection, Tracking, Segmentation, LiDAR, Linux, pytorch.

VinAl Research
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

La Rochelle, France

2021

- 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.

Education

Paul Sabatier Toulouse III	2019 – 2022
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	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
Awards & 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
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
Deep learning specifications Certificates, Machine learning Certificates, Andrew Ng, Coursera	2017
Reviewer for American Journal of Artificial Intelligence (AJAI)	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