Nguyen Anh Minh MAI

AI Research Engineer · Computer Science Major · IRIT, CNRS
Toulouse, France +33(0)758555539 mainguyenanhminh1996@gmail.com
nguyen-anh-minh-mai maiminh1996.github.io maiminh1996 Referees

About Me (skills - blog)

Knowledge: Machine Learning, Deep Learning, Image Processing, 3D Vision, Computer Vision (camera & LiDAR).
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: Unix (essentially), Windows.
Languages: French (Fluent), English (Fluent), Vietnamese (Native).

Working Experiences

IRIT, CNRS, Cerema & Easymile **Nov. 2019 – now**
Research Engineer 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, 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

- 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**
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 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**

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**