Nguyen Anh Minh MAI

AI Research Engineer · Computer Science Major · Paul Sabatier Toulouse III
Toulouse, France +33(0)758555539 mainguyenanhminh1996@gmail.com
nguyen-anh-minh-mai maiminh1996.github.io maiminh1996 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.
Developer Tools: git, docker, SuperPOD, shell, 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**
PhD Researcher *Toulouse, France*

- 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.
- Keywords: 3D Object Detection, LiDAR, Linux, CUDA, pytorch, tensorRT, Embedded Systems.

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**
Doctor of Philosophy - PhD, Computer Science *Toulouse, France*

INSA Centre Val de Loire **2014 – 2019**
Diplôme d'ingénieur (a parallel "Master 2" degree), Electrical Engineering *Bourges, France*

Publications

N.A.M. Mai et al. "3D Object Detection with SLS-Fusion Network in Foggy Weather Conditions," SENSORS.
N.A.M. Mai et al. "Camera and LiDAR analysis for 3D object detection in foggy weather," ICPRS 2022.
N.A.M. Mai et al. "Multimodal Sensor Fusion for 3D Object Detection for Autonomous Driving," (poster) ITS European Congress 2022.
N.A.M. Mai et al. "Détection d'obstacles par vision et LiDAR par temps de brouillard pour les véhicules autonomes," ORASIS 2021.
N.A.M. Mai et al. "Sparse LiDAR and Stereo Fusion (SLS-Fusion) for Depth Estimation and 3D Object Detection," ICPRS 2021, (received "Best Paper Award").

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 (2017), Machine learning Certificates, Andrew Ng, Coursera (2016).
Teaching assistant at Reinforcement Learning Virtual School (RLVS) hosted by the ANITI Toulouse, France (2021).
Document Analysis and Recognition at La Rochelle University, La Rochelle, France (2018).