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.
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

"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 **2022**
"Multimodal Sensor Fusion for 3D Object Detection for Autonomous Driving,"(poster) ITS European Congress **2022**
"Détection d'obstacles par vision et LiDAR par temps de brouillard pour les véhicules autonomes," ORASIS 2021 **2021**
"Sparse LiDAR and Stereo Fusion (SLS-Fusion) for Depth Estimation and 3D Object Detection," ICPRS 2021 **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**
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, Andrew Ng, Coursera **2017**
Machine learning Certificates, Andrew Ng, Coursera **2016**
Teaching assistant at Reinforcement Learning Virtual School (RLVS) hosted by the ANITI Toulouse, France **2021**
Summer school: Document Analysis and Recognition at La Rochelle University, La Rochelle, France **2018**