NGUYEN ANH MINH MAI

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 mainguyenanhminh1996@gmail.com mainguyen-anh-minh-mai maiminh1996.github.io maiminh1996 REFEREES

SKILLS

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

Programming Languages: Python, C++, C, CUDA, bash script, 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 - Jan. 2023

Toulouse, France

PhD Researcher
• 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. See our method here ${\bf \mathscr{G}}$

• 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

Nov. 2019 - Jan. 2023

Doctor of Philosophy - PhD, Computer Science (defense on January 2023)

Toulouse, France

INSA Centre Val de Loire

Sep. 2014 - Sept. 2019

Diplôme d'ingénieur (a parallel "Master 2" degree), Electrical Engineering

Bourges, France

Publications

Journals

• N.A.M. Mai et al. "3D Object Detection with SLS-Fusion Network in Foggy Weather Conditions," SENSORS

Conferences

- 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. "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 & AWARDS

Certificates & Awards

- Best paper honorable mention, ICPRS 2021 (2021)
- PhD research scholarship, Cerema Research Center, France (2019)
- 2nd prize in mathematics (provincial competition of the best high school students), Hue, Vietnam (2014)
- 2nd prize in mathematics (provincial competition of the best college students), Hue, Vietnam (2011)
- 3rd prize in mathematics 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)

Summer School

- 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)