NGUYEN ANH MINH MAI

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SKILLS

Knowledge: Machine Learning, Deep Learning, Image Processing, Computer Vision (camera & LiDAR), Embedded Systems, ADAS
Programming Languages: Python, C++, C, CUDA, shell 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, Linux, vim, VS Code, Doxygen, LaTeX
Languages: French (Fluent), English (Fluent), Vietnamese (Native)

EXPERIENCE

IRIT, CNRS & Cerema & EasyMile
Nov. 2019 – Jan. 2023
Research Scientist (PhD student) at Toulouse Institute of Computer Science Research   *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 at VinAI Research   *Vietnam*
- Implementing reproducing the SOTA LiDAR-based/ monocular-based 3DOD on waymo, nuscenes datasets.
- 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 at CEA-List   *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 at lab. Mathématiques, Image et Applications (MIA)   *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 15/01/2023)   *Toulouse, France*

INSA Centre Val de Loire
Sep. 2014 – Sept. 2019
Engineer's degree (a parallel "Master 2" degree), Engineering   *Bourges, France*

PUBLICATIONS

Journals
- Nguyen Anh Minh Mai, Pierre Duthon, Louahdi Khoudour, Alain Crouzil, and Sergio A. Velastin, "3D Object Detection with SLS-Fusion Network in Foggy Weather Conditions," SENSORS

Conferences
- Nguyen Anh Minh Mai, Pierre Duthon, Pascal Housam SALMANE, Louahdi Khoudour, Alain Crouzil, Sergio A. Velastin, "Camera and LiDAR analysis for 3D object detection in foggy weather," ICPRS 2022
- Nguyen Anh Minh Mai, Pierre Duthon, Louahdi Khoudour, Alain Crouzil, Sergio A. Velastin, "Détection d'obstacles par vision et LiDAR par temps de brouillard pour les véhicules autonomes," ORASIS 2021
- Nguyen Anh Minh Mai, Pierre Duthon, Louahdi Khoudour, Alain Crouzil, Sergio A. Velastin, "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, Andrew Ng, Coursera (2017)
- Machine learning Certificates, Andrew Ng, Coursera (2016)

Teaching
- Teaching assistant at Reinforcement Learning Virtual School (RLVS) hosted by the Artificial and Natural Intelligence Toulouse Institute (ANITI), Toulouse, France
- "Introduction to Programming and Algorithms in Python" at the Paul Sabatier University (UPS), Toulouse, France

Summer School
- Reinforcement Learning Virtual School (RLVS 2021) hosted by the Artificial and Natural Intelligence Toulouse Institute (ANITI), Toulouse, France (2021)
- Document Analysis and Recognition at La Rochelle University, La Rochelle, France (2018)

Referees

Dr. Khoa Luu
Assistant Professor, CSCE, University of Arkansas, United States
Former leader of the Applied Research group at VinAI Research
https://scholar.google.com/citations?user=JPAl8-gAAAAJ&hl=enoi=ao
Email: khoaluu@uark.edu

Professor Sergio A Velastin
Senior Research Scientist at Zebra Technologies Europe Limited
https://scholar.google.es/citations?user=FsE86kwAAAAJ&hl=en
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