# N.A. Minh MAI

## Languages & Technologies

- Foreign Language: Vietnamese (Native), English (Fluent), French (Fluent)
- Knowledge: Data Structures, Algorithms, OOP, Machine Learning (Deep Learning, Reinforcement Learning), Computer vision (2D/3D detection, Tracking, Classification, Segmentation, Depth estimation 3D reconstruction, Point Cloud)
- Programming languages: Python, C++, CUDA, SQL, HTML, CSS, JS
- Frameworks: Keras/ TensorFlow, Pytorch, OpenCV, NumPy, SciPy, Pandas, Scikit-learn, Matplotlib, Flask, ONNX, TensorRT, Qt
- Embedding: ROS (Robot Operating System), PCL (Point Cloud Library), ONNX, TensorRT, Raspberry pi 3, Nvidia Jetson tx2, AGX Xavier
- Tools: vim, Visual Studio, git, MySQL, SQLite, MongoDB, Doxygen, IATEX, Inkscape, Zotero

## **Work Experience**

Ph.D student IRIT & Cerema Nov 2019 - Now

Computer Vision & Machine Learning

• Currently i'am working on a project about environment perception (3D object detection and semantic segmentation on point cloud from LiDAR sensor) for self-driving cars.

Research intern LVIC Lab/ CEA List Feb - Aug 2019

Computer Vision & Machine Learning

- - Targeted TensorRT optimization for embedded platforms Nvidia Jetson tx2, AGX Xavier.
- - Fine detection and recognition of large-scale products using the 3D sensor Realsense d435.
- YOLOv3 tensorRT (private code), reconnaissance grocery product (private code) & private report

## Research intern MIA Lab/ Uni. La Rochelle Apr - Sep 2018

Computer Vision & Machine Learning

- - Object Detection, Object Recognition, Transfert learning.
- - Reimplementing YOLOv3 in tensorflow.
- - Raspberry PI 3/ TurtleBot 3.
- YOLOv3 code & report available upon request.

### **Publications**

#### Peer-reviewed conf. publ.

[C-1] "Sparse LiDAR and Stereo Fusion (SLS-Fusion) for Depth Estimation and 3D Object Detection" - 11th International Conference on Pattern Recognition Systems (ICPRS 2021)

- Nguyen Anh Minh MAI, Pierre Duthon, Louahdi Khoudour, Alain Crouzil, Sergio A. Velastin
- Accepted for publication and oral presentation

#### **Education**

## Toulouse, France Paul Sabatier University 2019 - Now

• Ph.D student in Computer Science Telecommunications

Bourges, France INSA CVL 2014 - 2019

• Engineer's Degrees (Diplôme d'Ingénieur) in Industrial Informatics, November 2019.

## **Additional Experience & Awards**

### **Certificates & Awards**

- Ph.D Scholarship (2019) for an outstanding candidate from the Cerema Research Center, France.
- Deep learning specifications Certificates (2017), Andrew Ng, Coursera.
- Machine learning Certificates (2016), Andrew Ng, Coursera.
- 2nd prize in mathematics (2014) at the provincial competition of the best high school students, Hue, Vietnam.
- 2nd prize in mathematics (2011) at the provincial competition of the best college students, Hue, Vietnam.
- 3rd prize in mathematics (2010) on pocket computer at the provincial competition of the best college students, Hue, Vietnam.

#### **Summer School**

• Document Analysis and Recognition (Jul 2018) at La Rochelle University, La Rochelle, France.

### **Teaching**

• TP (travaux pratiques) Python for 1st year students (2021) at Toulouse Paul Sabatier University, Toulouse, France