

---

## LANGUAGES & TECHNOLOGIES

- Languages: 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/C++, CUDA, SQL, Bash, HTML, CSS, JS
- Frameworks: Pytorch, Keras/ TensorFlow, 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, VS Code, git, L<sup>A</sup>T<sub>E</sub>X, MySQL, MongoDB, Doxygen, Inkscape, Zotero

---

## WORK EXPERIENCE

**Ph.D Student** **IRIT - UMR CNRS & Cerema** **2019 - Now**  
(Toulouse)

Computer Vision & Machine Learning

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

**AI Research Engineer** **VinAI**

Computer Vision & Machine Learning

- Focusing on point cloud for object detection.

**Research Intern** **CEA (Paris-Saclay)** **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** **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**  
(Toulouse III)

- Ph.D student in Computer Science.

**Bourges, France**

**INSA CVL**

**2014 - 2019**

- Engineer's Degrees (Diplôme d'Ingénieur ~MSc) in November 2019.

---

## **ADDITIONAL EXPERIENCE & AWARDS**

### **Certificates & Awards**

- Best Paper Award at the ICPRS 2021.
- 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**

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

### **Teaching**

- Teaching assistant at Reinforcement Learning Virtual School (RLVS 2021) hosted by the Artificial and Natural Intelligence Toulouse Institute (ANITI), Toulouse, France.
- TP (travaux pratiques) algorithm Python (2021) at Toulouse Paul Sabatier University, Toulouse, France.