

## Languages & Technologies

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- Foreign Language: English (2019): TOEIC 805, French (2019): DELF B2
- 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, Latex, Inkscape, Zotero

## Work Experience

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**Ph.D student** **IRIT & Cerema** **Nov 2019 - Now**

Computer Vision & Machine Learning

- Now, i'am currently 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.
- Messy YOLOv3 code & rapport available upon request.

## Publications

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### 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 Cruzil, Sergio A. Velastin
- Accepted for publication and oral presentation

## Education

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**Toulouse, France** **Paul Sabatier University** **2019 - Now**

(Toulouse III)

- 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**

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### **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.