

Benjamin Missaoui

Research Scientist intern at NVIDIA seeking a ML PhD position starting January 2025.

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RELEVANT WORK EXPERIENCE

Research Scientist intern, Video Understanding

July 2024 - Dec 2024
under Dr. Laura Leal-Taixé

[NVIDIA, Italy](#)

- Researching online Multi-Object Tracking with Graph Neural Networks

AI Research Engineer intern, Foundation Models

May 2023 - Dec 2023
under Dr. Chi Trung Ngo

[Bosch Research, Singapore](#)

- Explored [SAM](#) for view sampling in [contrastive learning](#). Increased downstream accuracy by 20+ points when pre-training on ADE20K or Cityscapes (accepted at [NeurIPS 2023 Workshop](#))
- Co-Invented a method for automated labeling for object detection with 83+ F1 score ([EU patent app.](#))

Research assistant, 3D Computer Vision

Jan 2023 - May 2024
under Prof. [Yongsheng Chen](#)

[Georgia Tech, Atlanta, GA](#)

- Extended [NeRFs](#) for reconstruction from images with arbitrary number of color channels (hyperspectral). Enabled prediction of continuous emittance and transmittance spectra (under review at [3DV 2025](#)).

Research assistant, Autonomous Vehicles

Sep 2022 - Feb 2023
under Prof. [Philippe Xu](#)

[CNRS - National Center for Scientific Research, France](#)

Sep 2022 - Feb 2023 (6 months, supervisor: Dr Philippe Xu)

- Designed and implemented a solution fusing 5 cameras, LiDAR, IMU and HD maps to generate high-quality pseudo-labeled data for object detection. Now deployed in the lab's pipeline for real-time vehicle localization with centimeter-level accuracy. Accepted at [IV 2023](#)

EDUCATION

Master of Science, Computer Science

Jan 2023 - May 2024
GPA 3.8/4.0

[Georgia Tech, Atlanta, GA, USA](#)

Relevant coursework: Advanced Computer Vision, Efficient Machine Learning

Master of Engineering, Computer Science

Sep 2018 - Jan 2023
GPA 3.9/4.0

[University of Technologie of Compiègne, France](#)

Relevant coursework: ML, Deep Learning, Autonomous Robotics

PUBLICATIONS & PATENTS

[1] [B. Missaoui](#), C. Yuan, "SAMCLR: Contrastive pre-training on complex scenes using SAM for view sampling". Accepted at [NeurIPS 2023 workshop on Self-Supervised Learning](#)

[2] [B. Missaoui](#), M. Noizet, P. Xu, "Map-aided annotation for pole base detection". Accepted at [Intelligent Vehicles Symposium \(IV\) 2023](#)

[3] N. C. Trung, [B. Missaoui](#) et al., Automated Image Annotation Method And System. [EU patent app.](#) 2023

Skills: [Python/C++](#), [PyTorch](#), [TensorFlow](#), [Keras](#), [ROS](#), [Git](#), [LLMs](#), [Novel View Synthesis](#), [Neural Rendering](#)