

# Lilian Hunout

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## Education

### ENS Paris-Saclay

MSC IN MATHEMATICS, VISION, LEARNING (MVA)

📅 Sep. 2023 - Current

📍 Saclay, FR

- World's leading university in mathematics (ARWU)
- **Courses** (1<sup>st</sup> semester):
  - Advanced learning for text and graph data (M. VAZIRGIANNIS)
  - Convex optimization and applications in machine learning (A. D'ASPREMONT)
  - Geometric data analysis (J. FEYDY)
  - Introduction to probabilistic graphical models and deep generative models (P. LATOUCHE, P.A. MATTEI)
  - Learning for time series (L. OUDRE)
  - Object recognition and computer vision (G. VAROL, I. LAPTEV, J. PONCE)
- Student representative

### INSA Centre Val de Loire

MENG IN INDUSTRIAL SYSTEMS

📅 Sep. 2018 - Sep. 2023

📍 Bourges, FR

- **Courses:** statistical theory and methods, machine learning, computer vision, complex systems engineering, risk management (GPA: 4.0)
- Student representative, active participation in various events (student council campaign, open days, etc.)

### University of Tours

MSC IN FUNDAMENTAL PHYSICS AND APPLICATIONS

📅 Sep. 2022 - Sep. 2023

📍 Tours, FR

- **Courses:** automatics, robotics, cyber-physical system, multiphysics modelling

### Tallinn University of Technology

SCHOOL OF INFORMATION TECHNOLOGIES (ERASMUS+ EXCHANGE)

📅 Sep. 2021 - Jan. 2022

📍 Tallinn, EE

- **Courses:** data mining, machine learning, system programming, embedded systems (GPA: 3.7)

## University Projects

### PRISME Laboratory

RESEARCH PROJECT FOR MEDICAL APPLICATIONS

📅 Feb. 2022 - Apr. 2022

📍 Bourges, FR

- Detection and tracking of micro-scale magnetic robots on an ultrasound dataset. **Keywords:** YOLOv5, ECO tracker

### TalTech Embedded AI Research Lab

END OF SEMESTER PROJECT

📅 Nov. 2021 - Jan. 2022

📍 Tallinn, EE

- Garage door cycle detection model from accelerometric dataset on an STM32 board with X-CUBE-AI. **First prize 250€**

## Links

📄 GitHub [lhunout](#)

🌐 Website [lhunout.github.io](#)

## Experience

### Eviden

AI & COMPUTER VISION RESEARCH INTERN

📅 Feb. 2023 - Aug. 2023

📍 Grenoble, FR

- Big Data & Security division, European project PREVENT PCP
- Detection of abandoned luggage in video streams to improve station safety and limit false alerts. **Keywords:** object detection, tracking, pose estimation, re-identification
- Implementation of score-based object/owner association algorithms.

### MBDA

EMBEDDED AI INTERN

📅 Apr. 2022 - Sep. 2022

📍 Bourges, FR

- Implementation of communication protocols, creation of an embedded Linux image on a Xilinx Zynq card, setting up a Vitis AI Docker environment, development of an image classification model.

## Skills

### Programming

Python • R • C • MATLAB/Simulink • SQL

### Libraries

Keras • Tensorflow • PyTorch • OpenCV • Pandas • NumPy • Scikit-learn • Matplotlib • ggplot2

### Miscellaneous

Shell • Windows • Linux • Linux Tools • CUDA • Docker • Slurm •  $\LaTeX$  • Markdown • Microsoft Office • Jupyter • Git • Jira (Agile/Scrum)

### Embedded systems

ARM • ATmega

### Soft Skills

teamwork • time management • problem-solving • documentation • communication • presentation skills • report writing

### Languages

English (professional proficiency, TOEIC 845/990)  
• French (native proficiency, voltaire certificate - business)

## Interests

- Sports: mountain biking, judo, snowboarding
- Trips abroad