



# Elie HATEM

ROBOTICS ENGINEER

## Details

Paris, France

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## Links

[Linkedin](#)

[Master's Thesis Simulation](#)

## Skills

- Nvidia Omniverse (Isaac Sim)
- Python, C++, C#
- AWS
- ROS / ROS 2
- Data Analysis & Visualization (Matplotlib, Seaborn)
- Git
- Tensorflow, Scikit-Learn
- Pandas
- Machine Learning / Deep Learning
- MATLAB / Simulink
- OpenCV
- 3DEXPERIENCE / CATIA

## Languages

- Lebanese Arabic (C2)
- French (B2-C1)
- English (C1)
- German (A1)

## Education

**Master's degree in Control and Robotics - Advanced Robotics, Ecole Centrale de Nantes, France**

September 2019 – August 2021

- GPA: 3.48/4, Rank: 6/43

**Bachelor of Engineering in Mechanical Engineering with a Minor in Engineering Management, Notre Dame University-Louaize, Lebanon**

September 2011 – August 2016

- Senior Project: Solar-assisted fixed-wing aircraft design and implementation.

## Certifications

- [Deep Learning Specialization](#) – deeplearning.ai, February 2025
- [Machine Learning Specialization](#) – deeplearning.ai, April 2024

## Employment History

**Robotics R&D Engineer & Data Scientist for Airbus, Accenture, Saint-Nazaire, France**

March 2023 – Present

- Contributed to achieving TRL6 on Auto-Rigging (A320 nose-fuselage) by building ML models (scikit-learn, TensorFlow) and implementing C# sensor drivers, reducing assembly time and improving repeatability.
- Designed a mobile robot concept for an Airbus quality inspection project and developed a virtual commissioning environment in NVIDIA Omniverse (Isaac Sim) to validate the design → generated RTX LiDAR synthetic data and ran point-cloud analytics to improve the digital twin and inspection coverage.
- Designed and validated motion control for a Stewart platform (trapezoidal & S-Curve velocity profiles with real-time end-pose adjustment).
- Ran experimental campaigns and built performance visuals with Pandas/Seaborn.
- Drove a mobile-robot concept for installing system modules on the next-gen Airbus aircraft, de-risking the full process through simulation-driven feasibility/clash analyses and stakeholder walkthrough videos that secured internal funding and surfaced edge cases pre-deployment.

**Industrial Architect R&D Engineer for Airbus, Umlaut - Part of Accenture, Saint-Nazaire, France**

October 2021 – February 2023

- Produced 3D modeling and tooling propositions for structural & systems installation ran virtual feasibility analyses to quantify workload and lead-time impact.
- Defined V&V protocols for automated supply chain projects, including risk assessments, robotics standards, and acceptance criteria for Airbus stakeholders.

**Robotics Research Intern, Laboratoire Des Sciences Du Numérique De Nantes (LS2N), Nantes, France**

February 2021 – August 2021

- Developed a trajectory planner and control algorithm for quadrotor flights in confined spaces using Model Predictive Control.
- Analyzed drone dynamics, incorporated robustness criteria, and validated through Gazebo/ROS2 simulations and experimental testing.

**Project Engineer & Head of Technical Department, Quest-4, Beirut, Lebanon**

November 2016 – August 2019

- Managed a 14-technician team, steering projects from HVAC design and proposals to quality control, records, and invoicing.