



Contact

Phone

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Email

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Portfolio

maximedemesy.github.io

Technical Skills

- Mechanical design (CATIA V5, SolidWorks, PTC Creo)
- Structural and thermal analysis (FEM, ANSYS)
- Mechatronics & actuator systems (motors, gearboxes, sensors)
- Embedded systems programming (C/C++, Arduino, STM32, nRF52)
- Prototyping (3D printing, laser cutting, test benches)
- PCB design (KiCad, Altium – basics)

Language

- **French** ★★★★★
Native
- **English** ★★★★★
Professional working proficiency (C1+)
- **German** ★★☆☆☆
Basic knowledge

Interests

- Open-source robotics
- 3D modeling and printing
- Martial arts and combat sports
- Hands-on engineering projects

MAXIME DEMESY

R&D Engineer in Mechatronics & Robotics

A senior mechanical engineering student at ENSMM set to graduate in September, with solid experience in design, prototyping, and experimental validation. Seeking a position in the fields of design, simulation, or R&D in the aerospace and defense sectors. Highly motivated to contribute to international high-tech projects within a leading engineering firm.

Education

○ National Graduate School of Mechanical and Microtechnics - (ENSMM)

Besançon, France

Engineering degree

Master's-level engineering program in mechanical, mechatronic systems, and microsystems, with a strong foundation in mechanical design, structural and thermal analysis, embedded systems, IoT, prototyping, advanced manufacturing, and multidisciplinary project work. Final-year specialization in Connected Object Design (CROC), combining mechanical engineering, electronics, and software integration for smart product development.

Experiences

○ 01/2024 - 07/2024

Forvia (Faurecia), Etupes, France

Engineering Intern

Designed a custom mechanical gripper and integrated smart sensors to improve fault detection and increase production reliability on an automated assembly line.

○ 03/2025 - 09/2025

CEA, Paris-Saclay, France

Engineering Intern

Involved in the mechanical design and experimental validation of a robotic gripper prototype within a European research project at CEA. Responsibilities include CAD modeling, additive manufacturing (3D printing), test bench development, and basic electronics integration.

○ 03/2026 - 09/2026

Université Laval, Québec, Canada

Graduation project in research

Developed a 4-DOF reconfigurable parallel robot that uses a compliant gripper manufactured using state-of-the-art additive manufacturing techniques. This project spans the entire process, from CAD to prototype fabrication and motor control.