Theo Guegan

07 82 95 45 55 | portfolio | github | theo.guegan.perso@gmail.com

19 October 2025

Internship – Robotics and Embedded Systems Engineering

As a final-year Computer Engineering student at the University of Technology of Compiègne (UTC), specializing in embedded computing and autonomous systems, I am actively seeking a six-month, end-of-studies internship starting in February 2026. Your mission to improve people's lives through cutting-edge service robots and automation technologies deeply resonates with my own aspirations. Passionate about solving complex technical challenges that merge hardware and software, I was thrilled to discover your internship opportunities in Robotics & Embedded Systems. I am confident that my skills in C/C++, Python, ROS, and real-time systems are perfectly aligned with the innovative projects at PAL Robotics.

My six-month internship as an Embedded Drone Software Engineer at Thales provided me with significant versatility and a strong capacity for adaptation. Working in a dynamic, start-up-like environment, I became accustomed to rapid iterations and frequent field testing. This role enhanced my C++ and embedded systems skills, notably through the development of a Lua scripting engine that significantly accelerated the deployment of new missions. This experience has prepared me to tackle complex projects requiring rigorous development and deployment on embedded targets, which I believe is essential for creating the reliable robotic solutions you specialize in.

My academic background demonstrates my autonomy and curiosity for innovation. My exchange semester at the University of Waterloo in Canada, a top-tier institution, not only proved my ability to adapt to a challenging international environment but also allowed me to delve deeper into crucial fields like AI and robotics. This advanced coursework, combined with my role as the technical lead for control and planning on the award-winning UTonome autonomous vehicle project (using Python/ROS), highlights my motivation to solve concrete technical problems. Furthermore, my success in hackathons in Canada, where I developed robotics and applied AI projects, underscores my ability to innovate and deliver effective solutions under pressure.

I am particularly motivated by the prospect of contributing to a company that is a leader in humanoid robotics and dedicated to shaping a future where robots improve our quality of life. My hands-on experience in building and programming robotic arms for teleoperation using reinforcement learning (PyTorch), and implementing a real-time OS from scratch on an STM32 platform, will allow me to quickly become a productive member of your team. My proactive and curious nature drives me to constantly learn and apply new knowledge to overcome technical hurdles.

I am convinced that my passion for new technologies and my determination to meet concrete technical challenges will find a stimulating environment within PAL Robotics. I would be delighted to discuss my skills and strong motivation with you in an interview.

Thank you for your time and consideration.

Sincerely,

Theo Guegan