Quentin PETIT

quentin.petit.2025@ifp-school.fr　　–　　github.com/quentinptt　　–　　+33.6.70.53.77.78

Academics

IFP School, ENS Paris Saclay (#1 in France), Paris, France　　　　　*2024 - 2025*
Master of Science in Automotive Engineering
IC Engine, Energy Storage, Electric Drives, Vehicle Dynamics, Hydrogen, Control Algorithms...

ISAE-Supméca, Paris, France　　　　　*2022 - 2025*
Master of Science in Mechatronics
Optimization, Automation, Mechatronics systems, C++, Python, Computer Vision..

Preparatory Class, Pierre Corneille, Rouen　　　　　*2020 – 2022*
Equivalent of Bachelor of Science
Highly rigorous programs that prepare students for competitive national exams to enter top engineering schools in France.

Work Experience

KNDS France Robotics, Versailles, France　　　　　*Sep 2023 – Feb 2024*
European Leader in the Defense sector for armored vehicles and artillery systems
Mechatronics Intern
- Designed a mechanical test bench for the electronic boards of armed robots with *Catia*
- Developed test automation with an intuitive interface
- Facilitated communication among project stakeholders including service providers and end-users

RATP Group, Vélizy, France　　　　　*Jan 2023*
Major global public transport operator headquartered in Paris
Operator Intern
- Conducted pre-operational inspections and maintenance on over 40 tramways
- Analyzed operational data through CAN from tramway sensors to identify and troubleshoot faults

Projects

Modelling the longitudinal dynamic behaviour of a vehicle
- Developed a dynamic model of a thermal engine vehicle and its driver using **Simulink**, incorporating speed control, transmission dynamics, and energy recovery systems.

UWB Real-time Tracking System for the 'Theatre de Strasbourg'
- Developed a robust real-time tracking solution, with a strong focus on performance optimization using advanced filtering algorithms (Kalman, EMA..) for high accuracy and efficiency.

Member of the Formula SAE Team (Vehicle Dynamics department)

Skills & Languages

Simulation : Matlab, Simulink, Amesim, Dymola
System Engineering : Cameo Systems Modeler
Software : Python, C, C++
CAD : Catia, Altium, Solidworks, NX
Hardware : STM32, PIC, ATMega
Project Management : Jira, Asana, Trello (Scrum)
BDD : SQL, MongoDB
Languages : French (Native), English (Fluent) and Italian (A2-Basic, since 2023)
Other tools : Excel, MoTeC, Abaqus, 3D Printing