Adrien CHARDON

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🖥 cv.nodraak.fr/en.pdf

Adrien is a software and electronics engineer, with an expertise in embedded systems. He is interested in robots, launchers and inter-planetary probes. He cares about code quality, automation and open source software.

Work Experiences

Embedded Software Engineer - Exomars

GMV
Since May 2019
Madrid, Spain

- Exomars rover: as the **main technical responsible** I developed and validated a middleware to interface the autonomous navigation libraries (CNES) with the rover platform (Airbus UK). During development, I configured a **CI pipeline to ensure high quality code and up to date reports**: running automated test on x86 and Sparc, tracking coverage and static analysis results, and automatically generating documentation.
- Exomars cruise and descent modules: I **helped in the development of the GNC algorithms**: code and bug fixes, tests and validation, and improvement of the software quality metrics.
- *Skills: programming (embedded C, Python), unit and integration testing (VectorCast, Tsim, Leon 2 FT on Rasta), quality tools (Cppcheck, Gitlab CI, code coverage), software development standards (MISRA-C, ECSS-40B).*

Project Leader - Smallsat ECE3Sat

ECE PARIS
2017-2018
Paris, France

- In collaboration with a team of 25 people, I designed and built a nano satellite in order to study a new de-orbit technique using Earth's magnetic field.
- **I managed the team** (5 people) responsible for the satellite architecture and the on-board computer. **We implemented the on-board communication** bus with CAN and ASN.1 to ensure a reliable communication between subsystems.
- *Skills: distributed architecture design, sizing and μcontrollers choice, team management and coordination.*

Software Engineer - Robot Gali X

ECE PARIS
2016-2017
Paris, France

- With a team of 5, **we designed and built an autonomous robot** for the French Robotic cup.
- **In charge of the software**, I designed a **distributed architecture** to allow easier reuse for the future robots.
- I implemented a **telemetry GUI** to monitor the robot status and a **simulator** to assess the performances (recompilation of ARM code for execution on x86).
- *Skills: embedded C/C++, Python (telemetry GUI, software-in-the-loop simulation), drivers for CAN bus and other peripherals, ARM μcontrollers, Git.*
- *Video demo and source code available at* `https://cv.nodraak.fr`

Education

2018 - 2019	**Advanced Master**, *TAS Astro: space systems design.* ISAE-Supaero - Toulouse, France	
2013 - 2018	**Engineering Degree**, *Majoring in embedded systems.* ECE Paris - Paris, France	
2015 - 2016	**Bachelor of Science**, *Electronics & IT.* Aalborg University - Aalborg, Denmark	

French	**Native**.
English	**Fluent**, *TOEIC: scored 935/990 in 2017.*
Spanish	**Conversational**.
German	**Notions**, *Eager to improve.*

Hobbies

Learning and making	Software and robotics projects - Recently: learning Rust lang
Writing	`https://blog.nodraak.fr`
Sports	Roller skating, social dancing