

INTERSHIP OPPORTUNITY

Electronics

COMPANY

3D Aerospace (www.3daerospace.eu) is an European young start-up established in June 2018. We are located at Toulouse (France) in Montaudran and are developing an innovative new generation of GNSS (GPS / Galileo) mapping receiver.



The company is based on equality gender, positive working atmosphere, hard work transparent communication and continuous improvement. We want to propose a safe environment to make innovation happens. At 3D, failure is perceived as an opportunity to learn and improve and is accepted as long as a rigorous and structured work is applied.

3D Aerospace is currently developing two brands, DeVines and GaliGo. DeVines is part of the precision viticulture market, which brings together all the technological innovations related to viticulture. With DeVines, we offer an all-in-one solution, which combines several services in a single tool. GaliGo, our second brand under development, is part of the connected cities market. GaliGo offers a real-time updated traffic mapping solution and delivery network optimization.

YOUR ROLE

During the period of the contract, you will have the following responsibilities:

1. Electrical Design Intern

As an electrical design engineer, you will be in charge of:

- 1.1. Maintaining the system and hardware subsystems requirements.
- 1.2. Creating new and modifying existing PCB hardware through trace and surface mount soldering while maintaining the bill of materials.
- 1.3. Creating and maintaining PCBA manufacturing folder (Design justification, 2D drawing, gerber files, schematics, component datasheet and libraries).
- 1.4. Working directly with suppliers to solve electrical design problems.
- 1.5. Understanding fundamental electrical and electronic components and their functions such as LDOs, passive components, DC/DC converters, Arduino hardware/ firmware, and LCD displays.
- 1.6. Being aware of the latest development in the industry (technology scouting).
- 1.7. Collaborating with project team members such as Mechanical Engineers, Project Managers, Industrial Designers, Operations subject matter experts, and external suppliers during product design and release to integrate multiple project requirements into a cohesive design
- 1.8. Providing task summaries to the project team to create and maintain accurate project schedules.
- 1.9. Communicating risks and opportunities to the project team and functional management.

2. Hardware / Software interface Intern

As an HW/SW interface engineer, you will be in charge of:

- 2.1. Understanding the software needs from the engineering team and being able to translate the needs into clear, qualified and quantified requirements.
- 2.2. Reviewing the latest sensor and component development in order to always improve the manufacturing, performances, cost efficiency of the different printed boards.

- 2.3. Providing engineering support to the software team while integrating the software into the hardware.
- 2.4. Being familiar with the USB, SPI, I2C, UART communication protocols.
- 2.5. Writing Design Justification report and other technical reports.
- 2.6. Collaborating with software team for the integration and image quality tuning teams

3. Electronics Tester

Within the test engineer role, you will be in charge of:

- 3.1. Defining test need and approach and prepare test plan.
- 3.2. Establishing, prepare and monitor the qualification tests and acceptance tests according to agreed planning, budget and quality.
- 3.3. Ensuring the quality process via preparing appropriate milestones (MRR, TRR, PTR, TRB).
- 3.4. Design and ensure availability of test MGSE or EGSE depending on test needs.
- 3.5. Writing mechanical and electronic test procedures to test the eHermes receiver.
- 3.6. Writing test reports following the completion of the tests.

REQUIREMENTS

<i>Soft Skills</i>										<i>Minimum Requirements</i>										
Team spirit										ECAD software										
Hard-worker										English										
Motivator										French										
Communication										Word – Excel										
Team Mentality										Arduino										
Willingness and Ability to Learn										Electronics degree (MSc or Meng)										

ADDITIONAL INFORMATION

Location: 3 Avenue Didier Daurat, 31400 Toulouse, France

Internship Duration : 6 months starting from February / March to End of August / September 2022.

Working Language: English

Internship allowance: about 575.50€ per calendar month (3.90€ per hour)

Contact email address: contact@3daerospace.eu

Working conditions: 3D Aerospace is a small team of passionate and hard worker people. Our small size is actually one of our main strengths as it provides agility, flexibility and a sense of family-size company. Our organisation is based on daily scrums and monthly milestones review.

Application process: One case study to prepare offline and an one to one interview with 3D Aerospace core team.

Follow-on possibility: Following the completion of the internship and based on satisfactory results during the internship you could be offered job opportunity at the company.