Guidance Navigation & Control Engineer

Description of the Company

Since 2016, ODYSSEUS Space aims at increasing the flow of goods and information in the Solar System. For this purpose, the company is developing cost-effective technologies such as laser communication and autonomous navigation.

The technologies developed by ODYSSEUS can already address the small satellite constellations markets while paving the way for future applications in the Space Resources Utilisation value chain.

Active in Luxembourg and Taiwan we are looking for motivated professionals to work collaboratively with a young, international and talented team on what will be the space technologies of tomorrow.

Description of the Job

As a GNC Engineer part of ODYSSEUS Space team in Luxembourg, you will be working on the design, manufacturing, testing and validation of our novel autonomous GNC technology: ASTRAEUS.

ASTRAEUS provides autonomous guidance navigation & control; control capabilities to spacecraft anywhere in the Solar System.
Its unique algorithm is especially adapted to interplanetary cruise to the Moon and beyond.

At least 3 years of professional experience in GNC is needed. Complementary experience in astrodynamics, software, simulations, sensors or signal processing are strong advantages for the job.

ODYSSEUS Space can offer a competitive salary and fast career development opportunities to the candidate.

Role

- Design, build, and test autonomous and highly reliable GNC systems to support controlled and precise interplanetary cruise, orbital rendezvous & docking, station keeping and celestial bodies proximity operations.
- Support configuration design studies and develop prototype control and guidance system solutions.
- Establish and build GNC software architectures and control system components in MATLAB, Simulink, and C.
- Support systems analysis with a cross-functional mindset to support system level architectural decisions.
- Conduct stability and performance assessments including the development of linear and non-linear models.
- Perform analyses, including simulations, to satisfy top-level system specifications and requirements
- Develop and execute software, hardware-in-the-loop and flight demonstration testing.

- Identify opportunities for operational system safety improvements and cost savings.
- Preparation of the documentation for design reviews.

Must have

- At least 3 years of professional experience in the relevant field
- Demonstrated advanced knowledge in designing, testing and flying aerospace guidance and control systems for spacecraft
- Good comprehension of AOCS
- Demonstrated experience with MATLAB and Simulink and associated auto-coding practices
- Hands-on experience with hardware-in-the-loop testing and test development
- English proficiency
- Simulation experience or sensors development experience
- Experience in both working independently and as part of a team
- The willingness to participate in a start-up adventure
- The willingness to learn new skills
- Highly organized and capable of planning and guiding complex technical work
- Strong oral and written communication skills

Nice to have

- Master degree/PhD in any relevant field, or equivalent
- Experience in product development
- Experience in prototyping and testing
- Experience in any other design field (Software…)
- European Citizenship

Contact

hr@odysseus.space