Junior Guidance, Navigation & Control (GNC) Engineer

LMO SARL is a company based in Luxembourg developing innovative technologies for Vision-Based Space Situational Awareness (SSA) Systems to support future missions for In-Orbit servicing and dual-use applications (civil and defence). LMO SARL is involved in the design, development, verification, build, test, and operation of its space-borne systems and does so through collaboration with major research and industrial players in the field of Computer Vision including AI solutions.

Position Summary

The Junior GNC Engineer will participate in the definition, design, analysis, and implementation of the GNC elements for a space rendezvous mission based on the AI-powered Visual Navigation system developed by LMO. Working within a multi-disciplinary team in the framework of in-orbit servicing applications he/she will be involved from early phase in the definition and analysis of the GNC system requirements for in-orbit servicing, including rendezvous, docking and berthing applications. He/she will contribute to the development of the GNC solution throughout its lifetime, including verification & validation aspects. The role will involve strong emphasis in modelling and analysis, requirements derivation and simulations and prototype testing.

Capabilities we are looking for

- Strong skills in modelling spacecraft dynamics and attitude control. Knowledge of reaction control system (RCS) dynamics is a plus.
- Good understanding of spacecraft GNC architectures, including first principles and practical aspects of AOCS sensors and actuators.
- Understanding of linear control theory. Experience in non-linear control applications is a plus.
- Derivation, analysis, and verification of GNC related requirements for spacecraft applications.
- Experience with Matlab/Simulink or Python programming.

Things that are a bonus, but not a must

- A first professional experience involving GNC topics.
- Experience in the Validation & Verification (V&V) process of a GNC system.
- Experience or exposure to GNC implementation in software for embedded applications.
- Proficiency in C and C++ programming languages
- Experience in modelling spacecraft flexible modes and sloshing

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- Experience in testing AOCS systems including control modes performance

What we offer

- Work autonomy (low management overhead)
- International environment
- Flexible hours, hybrid work
- Fast career evolution
- Engagement with the Space and Machine Learning communities (Academia, Space Agencies, conferences, etc.)

Location

Technoport – Belval, Luxembourg

9, Avenue des Hauts-Fourneaux, L-4362, Esch-sur-Alzette

Conditions

For this role the base salary expectation, depending on experience, is between 60,000 – 80,000 EUR per annum for a 40-hour work week. This includes 26 days annual leave.

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