



Talent driven
culture.

Senior GNC/AI Engineer (M/F)

Ref.^a T202103

Our client is a Portuguese space systems engineering company, delivering advanced design solutions and turn-key space SW systems. Building on a solid team of highly motivated and specialized engineers, is now a reference player in the European space sector, leading in the areas of Mission Analysis, Guidance, Navigation and Control, Global Navigation Satellite Systems Technologies, Ground Segment Systems and Earth Observation applications.

We are looking for a Senior Engineer to be integrated in the GNC/AOCS Competence Centre (CC) of the Flight Systems Business Unit, to support new growth areas in Guidance, Navigation, and Control (GNC), enabled by Artificial Intelligence (AI).

Location: Lisbon, Portugal

Main Accountabilities:

- Project Management of Control and AI activities, within the GNC/AOCS CC;
- Technical Leadership of AI-based GNC (especially Control-related) activities (projects and proposals) within the Competence Centre;
- Specification, design, implementation, and validation of GNC algorithms, to be applied to satellites, launchers, and re-entry vehicles, among others;
- Development and implementation of AI-based algorithms for Control, as well as other domains, including planning and Failure Detection, Isolation, and Recovery (FDIR).

The activities involved may include:

- Model-based design and software implementation of AI-based GNC algorithms;
- Mathematical modelling;
- Specification and validation of AI-based GNC solutions;
- Analysis and trade-off of different AI techniques and frameworks;
- Analysis and trade-off of AI and non-AI GNC solutions;
- Technical and project management.

Requirements & Qualifications:

- Required: a recognized engineering degree (Mechanical, Aerospace, Electrical, Electronic) or a related degree (e.g., Physics, Maths);

If you meet the above requirements, please send your application via email: careers@qsr.consulting with reference to T202103_PRO_Senior GNC/AI Engineer (M/F).

- Desired: Postgraduate studies (MSc or PhD) on engineering and providing a solid background in most of the following topics:
 - Artificial intelligence (AI) techniques, including machine/reinforcement learning and deep learning (required);
 - Classical and robust control techniques;
 - Optimal control techniques;
 - Adaptive control techniques and system identification;
 - Optimization techniques;
 - Atmospheric flight dynamics.
- At least 4 years of experience in the practical application of the domains relevant to the post (relevant MSc & PhD studies would also be considered);
- Required:
 - Strong background in control and simulation of dynamic systems;
 - Strong background in AI, especially for Control applications;
 - Capacity to understand new concepts and apply them to engineering problems;
 - Good programming skills;
 - Experience with Matlab and Simulink.
- Desired:
 - Experience in atmospheric flight;
 - Solid theoretical background in GNC/AOCS;
 - Background on multivariable robust control;
 - Background on optimal and adaptive control;
 - Experience in failure detection, isolation, and recovery;
 - Background in design and verification of cyberphysical systems.
- Good level of English (spoken and written);
- Capability to integrate in and work within a team;
- Self-initiative;
- Autonomy and self-development;
- Responsibility towards the customer and colleagues.

Offer:

- Wage package appropriate to the presented experience;
- Career development opportunity;
- Contractual link established directly with the client.

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