Software Engineer - Sensor Fusion & Simulation (M/F)

2019-032-BE-SYS-RS-SFE

spaceapplications SERVICES

Space Applications Services is a company based in the Brussels area (BE) that provides products and services for the space sector in many areas from Avionics, Robotics, Human Exploration, Science and Earth Observation.

The successful candidate will be based in our main office at Sint-Stevens-Woluwe (Brussels Area).
The position is in the Systems Department, Robotics Software (RS) Team.
The candidate will mainly report to RS Team Lead.

The main scope of the work includes the analysis, simulation, development and testing of sensor/data fusion and multi-robot simulation dealing with planetary (exploration), orbital (on-orbit servicing) and Marine robotics, as part of ongoing and new H2020 & ESA projects in the domains of Space Robotics and Inspection & Maintenance applications.

Tasks and Responsibilities

• Analysis and development of perception, mapping, localisation and SLAM techniques for specific application scenarios
• Development of multi-robot simulator(s) to generate synthetic data for sensor fusion and control of robots
• End-to-end implementation, testing, integration and optimisation on target robot architecture
• Generation of the technical documentation required all along the process.

Qualifications and Experience

• MSc or PhD in relevant fields (e.g. robotics, computer science, computer vision, AI-ML or software engineering)
• Strong theoretical and practical background in image processing, SLAM, state estimation and filtering
• Very strong programming skills (C++, Python) on Linux environment
• Thorough experience of SW development in ROS & ROS2 and simulation in Gazebo (additional robotics middleware or simulators is desirable)
• Good proficiency with technical documentation
• A selection of the following will be considered as an asset:
    • At least 1 year of research or industrial experience
    • Image processing: Feature extraction, 3D point clouds registration, model detection, matching and tracking using analytical or AI-ML techniques
    • OpenCV, PCL, ViSP, TensorFlow, Qt, Gazebo, Web technologies and AWS
    • Mobile robotics-modelling, localisation, mapping, motion control, path planning
    • Robotics software architectures (design), Robotics Middleware and Networking
    • Experience in Real time operating systems and embedded systems
    • Gitlab and Continuous Integration methodologies.

The successful candidate will have the following skills

• A proactive approach, with initiative and ability to work independently
• Ability to:
  • Synthesise, summarise and draw conclusions
  • Adhere to strict standards of confidentiality
  • Work in distributed international teams
• Strength to cope with schedules and deadlines
• Excellent organisational and communication skills
• Excellent written and spoken English.

What Do We Offer?

• Working in a growing company with Staff located in Belgium, Germany and the Netherlands
• A professional, pleasant atmosphere with motivated and passionate staff, where autonomy and initiatives are encouraged
• An interesting remuneration package with a relocation allowance, if applicable
• A full time position with an indefinite contract of employment.

How To Apply?

➢ Please send your CV and Motivation Letter (both in English) to jobs@spaceapplications.com, to the attention of Mr. Shashank Govindaraj

The candidate shall be eligible to work in the European Union or in possession of a European Blue Card for two or more years.

We are looking for someone to start as soon as possible.