KIOS RESEARCH AND INNOVATION CENTER OF EXCELLENCE
UNIVERSITY OF CYPRUS
Software Engineer Position (Multi-Robot Systems)

Title   : Software Engineer (Special Scientist)
No. of Positions   : One (1)
Category   : Employment contract
Location   : University of Cyprus, Nicosia, Cyprus

The KIOS Research and Innovation Center of Excellence (www.kios.ucy.ac.cy) at the University of Cyprus announces one (1) Software Engineer position for full-time employment. The successful candidate will analyze, design, implement, maintain, and document software solutions, focusing on **Multi-robotic Systems, under the H2020 SESAME (Secure and Safe Multi-Robot Systems)** KIOS project funded by the European Union.

Who we are:

The **KIOS Research and Innovation Center of Excellence** is the largest research center at the University of Cyprus and in 2017 was upgraded to a European Research Center of Excellence through the KIOS CoE Teaming project. Currently, the Center employs more than 170 people who are supported by externally funded research and innovation projects. The KIOS CoE operates in a diverse environment as an equal opportunity employer.

What we do:

KIOS provides an inspiring environment for carrying out top level research and innovation in the area of Information and Communication Technologies, with emphasis on the Monitoring, Control and Security of Critical Infrastructures. Such infrastructures include power and energy systems, water networks, transportation networks, telecommunication networks and emergency management and response. The Center instigates interdisciplinary interaction and promotes collaboration between industry, academia, and research organizations in high-tech areas of global importance.

Why work at KIOS:

You will have the opportunity to work on seminal research and innovation projects, with great impact on the community end the environment, not only in a local but also in a global scale.

In KIOS we strive to create a multicultural, diverse and inclusive workplace and we strongly support the continuous personnel evolvement and development, both personally and professionally, to fulfill your long-term goals. We offer internal and external professional training, covering both technical and soft skills, to suit yours and the Center's needs.

Job Details

The successful candidate will contribute towards the software development cycle, such as identifying software system requirements, perform software system analysis, design and implement software programs/systems, maintain (review, troubleshoot, debug and upgrade) existing systems and develop program and/or system documentation, including description reports, user-manuals, administrator-manuals, flowcharts, layouts, and diagrams, related to the EU H2020 project **SESAME** (Secure and Safe Multi-Robot Systems).

SESAME is a Horizon 2020 research project addressing key aspects of Multi-Robot Systems including emergent behavior, uncertainties in the operating environments, variability of robotic hardware platforms, security threats and safety issues.

The KIOS CoE will offer its technical expertise **for developing and implementing the multi-robotic coordination and data collection system, concentrating on collaborative drone systems**. Furthermore, KIOS in collaboration with the Cyprus Civil Defense are responsible to **evaluate new technologies related to reliability, safety, security, using multi-robot systems with drones, for emergency response applicatio**ns. For more information on the SESAME project you can visit www.sesame-project.org

Duties and Responsibilities:

The successful candidate is expected to be trained and work on one or more of the following:

- Develop and implement the multi-robotic coordination and data collection system.
- Develop and design autonomous robotic systems software.
- Develop and implement scalable AI algorithms through the ROS operating system (e.g., motion planning, decision-making, object detection and coordination of multiple autonomous systems).
- Implement and evaluate algorithms in a simulation environment and perform real-world field tests.

Profile of the ideal candidate:

- Attention to detail
- Problem solver
- Team-player
- Be reliable and trustworthy
- Be flexible and eager to learn
- Be able to adapt in a fast-paced dynamic environment
- Have good communication, organizational and self-management skills
- Very good knowledge of the English language

Qualifications and Experience:

- Bachelor's and/or Master's degree in Electrical/Computer Engineering, Computer Science or other relevant field from an accredited institution.
- Hands-on attitude.
- Expertise in programming with C++ and Python within the Linux environment.
- Expertise in developing and implementing machine learning/AI and Vision algorithms, ideally for autonomous robotic systems, will be considered a plus.
- Expertise with drones, autonomous systems and robotics software (e.g., ROS) will be considered a plus.

Employment Terms:

The position is on a contract basis. Initially, a one-year contract will be offered, which is renewable based on performance for multiple years and beyond the scope of the SESAME project. The gross monthly salary depends on the candidate's qualifications and experience and it will be between **€1750-€2500**. From this amount, employee contributions to the Cyprus government funds will be deducted. The 13th salary bonus is incorporated in the monthly salary. Maternity leave will be granted based on Social Insurance Laws from 1980 until 2012.

Application:

Interested candidates should submit the following items online through the link:
https://applications.ucy.ac.cy/recruitment

- Cover letter explaining the interest of the applicant in pursuing a career at the KIOS CoE, along with employment availability date
- Short summary of prior work experiences, activities and accomplishments (can be combined with the cover letter) (2 pages maximum)
- Copies of transcripts of BSc/MSc or other degree(s)
- A detailed curriculum vitae in English or in Greek
- Identify at least two referees that can provide reference letters.

The University of Cyprus shall collect and process your personal data according to the provisions of the General Regulation on Personal Data 2016/679 (EU).

The applications should be submitted as soon as possible, but not later than **Monday, 14 of March 2022, at 5 pm**. The evaluation of the applications will begin immediately. **Candidates will be informed of the result of their application by the KIOS CoE**.

For more information, please contact the KIOS Center of Excellence, by phone at +357 22893460 or via e-mail at kioshiring@ucy.ac.cy.