

## KIOS RESEARCH AND INNOVATION CENTER OF EXCELLENCE

### Software Engineer Positions

<b>Title</b>	: Software Engineer (Special Scientist)
<b>No. of Positions</b>	: Five (5) Positions
<b>Category</b>	: Employment contract
<b>Location</b>	: University of Cyprus, Nicosia, Cyprus.

The **KIOS Research and Innovation Center of Excellence** ([www.kios.ucy.ac.cy](http://www.kios.ucy.ac.cy)) at the University of Cyprus announces five (5) Software Engineer positions, for full-time or part-time employment. The successful candidates will analyze, design, implement, maintain and document software solutions under multiple KIOS projects funded by the European Union, including the flagship KIOS CoE Teaming project, as well as national or industry-funded projects. Applicants are expected to have physical presence to the KIOS CoE in Nicosia, Cyprus.

#### ***University of Cyprus***

The University of Cyprus was officially founded in 1989 and started operating in Nicosia, the capital of Cyprus, in 1992. Within a short time, the University of Cyprus managed to achieve international recognition through an impressive course of development. Today, it is ranked 67<sup>th</sup> young university (under 50 years) and #251-300 worldwide in Engineering and Technology by the Times New Higher Education Rankings.

These great distinctions are the result of our dedication to excellence and continuous development. The University of Cyprus managed to stand out and receive awards for the new paths it has opened up in particularly demanding and dynamic contexts of research. The University of Cyprus becomes better every year; therefore, it wishes to attract the best employees.

To this end, the University constantly develops its programs of study and recruits high-caliber staff who will contribute significantly to the design of new curricula, both at undergraduate and graduate level. One of the strategic aims of the University of Cyprus is the further promotion and development of research, in which new staff are expected to play an essential role.



#### ***KIOS Research and Innovation Center of Excellence (KIOS CoE)***

The KIOS Research and Innovation Center of Excellence is the largest research center at the University of Cyprus and has recently been upgraded to a European Research Center of Excellence through the KIOS CoE Teaming project. Currently, the Center employs more than

130 researchers (at various ranks/levels), who are supported by externally funded research projects. The vision of KIOS is that will grow to 180-200 researchers by 2022.

KIOS provides an inspiring environment for carrying out top level research in the area of Information and Communication Technologies with emphasis on the Monitoring, Control and Security of Critical Infrastructures including 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. The KIOS CoE operates in a diverse environment as an equal opportunities' employer.

### **Job details:**

#### ***Short Description/Duties and Responsibilities:***

The successful candidates will participate in various parts or specific parts of 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, develop program and/or system documentation, including description reports, user-manuals, administrator-manuals, flowcharts/layouts/diagrams and coordinate small teams and/or small-scale projects related to their expertise. Further, they will assist in the preparation of reports and project deliverables.

#### ***Profile of the ideal candidate:***

The ideal candidate must possess excellent programming skills, , have excellent team-working skills, have strong self-management skills and very good knowledge of the English Language. Must possess technical and analytical skills and the knowledge needed to perform specific information technology, mathematical or scientific tasks, and must be able to collect and analyze information, solve problems and make decisions. In addition, he/she should have the abilities of critical thinking and complex-problem solving, where he/she should be able to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to specific problems. Finally, he/she must also exhibit knowledge of the application of principles used in the field of engineering, to the design, development, testing, deployment and management of software systems.

#### ***Job-Specific Skills and Expertise:***

The applicants can be junior entry level or experienced research engineers. They need to demonstrate good understanding in some of the skills in one of the following areas, and an interest to learn new topics. Please note that training will be provided upon hiring to enhance knowledge on the below areas:

- Front-end design (HTML, CSS, JavaScript Frameworks)
- Back-end design (RESTful API, Python/Java, PHP)
- Database systems (Relational, Graph)
- Knowledge of Telecommunication protocols (e.g., LoRaWAN, Z-wave, Zigbee)
- Experience with PLC programming.
- IoT Platforms (e.g., FIWARE, ThinkSpeak)
- Mobile Application Development, (e.g., Android Studio - Java, iOS Xcode - Swift, React, Angular)

- Experience in computer vision and/or image processing pipelines, including traditional statistical methods and feature extraction approaches, 3D Geometry and point-cloud analysis, and deep learning (detection, segmentation)
- Embedded software development platforms for algorithm implementation and machine learning (such as NVIDIA Jetson family) is a plus, and experience in prototyping real-time applications (e.g., TensorRT)
- Good knowledge of machine learning and statistics (supervised learning, unsupervised learning, time-series analysis and forecasting)
- Experience with the packages: pandas, scikit-learn and TensorFlow / Keras or PyTorch.

**Qualifications:**

- Bachelor's and/or Master's degree in Computer Engineering or Computer Science or other relevant field from an accredited institution.
- Previous experience will be considered an advantage.

**Employment Terms:**

The positions are on a contract basis. Initially, a one-year contract will be offered but this is renewable based on performance. The annual salary includes employee's contributions, depends on the candidate's qualifications and expertise and will be between €21,000 - €30,000 gross. The 13<sup>th</sup> 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>

- i. Cover letter that specifies their employment availability date and why they want to pursue a career at KIOS CoE.
- ii. Short description of their academic and research experiences (can be combined with the cover letter) (1 page maximum)
- iii. A detailed curriculum vitae in English or in Greek
- iv. Copies of transcripts of BSc/MSc/PhD degree(s)
- v. Identify at least two referees that can provide reference letters.

The applications should be submitted as soon as possible, but not later than **Sunday, 31<sup>st</sup> of January 2021, at 5 pm**. The evaluation will begin immediately upon receipt of the application. For more information, please contact the KIOS Center of Excellence, by phone at +357 22893460 or via e-mail at [kioshiring@ucy.ac.cy](mailto:kioshiring@ucy.ac.cy).