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KIOS RESEARCH AND INNOVATION CENTER OF EXCELLENCE Special Scientist for Research – Research Engineer I (Power Systems)

Title	: Special Scientist for Research (<u>Research Engineer I</u>)
No. of Positions	: One (1)
Category	: Employment contract
Location	: University of Cyprus, Nicosia, Cyprus.

The KIOS Research and Innovation Center of Excellence (<u>www.kios.ucy.ac.cy</u>) at the University of Cyprus announces one (1) Special Scientist for Research (Research Engineer I) position, focusing on Power Systems, for full-time employment. The successful candidate will conduct research and development activities within the context of research and innovation, as well as provide technical and research support in the area of Information and Communication Technologies with emphasis on the monitoring, control and security of critical infrastructure systems. Additionally, will implement and/or support projects in order for the Center to achieve its strategic objectives.

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 180 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 various high-profile projects with great impact on the society and 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.



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Job Details

The successful candidate is expected to:

- Design a long-term forecasting methodology to estimate the load demand and the total photovoltaic installations in each substation of Electricity Authority of Cyprus.
- Develop a software tool (with a user interface) to perform statistical analysis of the operating conditions and to forecast the load demand and distributed generation.
- Design and develop simulation models for power systems or power electronics converters using MATLAB/Simulink or DigSILENT.
- Develop digital twins for power systems (using a real time simulator) and perform hardware in the loop investigations.
- Develop monitoring, control and optimization applications that will interact in real-time with the power systems digital twins.
- Attend project meetings for technical coordination of tasks.
- Prepare reports and project deliverables.
- Contribute to the generation of results to be published in top international conferences and scientific journals.

The required skills and expertise for the announced position include one or more of the following areas:

- Operation, monitoring, control, and optimization of renewable-rich power systems.
- Long-term forecasting of load demand or generation for planning purposes and short-term forecasting for energy management purposes.
- Grid integration of renewable energy sources and control of power electronics converters.
- Technical expertise and experience in simulation and modeling of power systems, using commercial simulation software (e.g., MATLAB/Simulink, DIgSILENT PowerFactory, PSCAD).
- Technical expertise on real time simulations and hardware in the loop investigations.

Profile of the ideal candidate:

- Problem solving skills
- Team-player
- Reliable and trustworthy
- Flexible and eager to learn
- Able to adapt in a fast-paced dynamic environment
- Have good communication, organizational and self-management skills
- Excellent knowledge of the Greek and English language

Qualifications:

• Bachelor's or/and Master's Degree in Electrical Engineering or Computer Engineering or a related field from an accredited institution



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Employment Terms:

The position is on a contract basis. Initially, a one-year contract will be offered, which is renewable based on performance. The gross monthly salary depends on the candidate's qualifications and experience and will be between €1500 - €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 Maternity Protection Law 1997(N.100(I)/1997), and the existing amendment laws.

Application:

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

- 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
- Copy of English language certificate
- Identify at least two referees that can provide reference letters.

The applications should be submitted as soon as possible, but not later than **Friday**, **17**th **of February 2023**, **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**.

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 University of Cyprus (UCY) is committed to promoting inclusivity, diversity, and equality, as well as the elimination of all forms of discrimination in order to provide a fair, safe, and pleasant environment for the entire university community, where students and staff members will feel supported both in their professional and personal development, within and beyond their multiple identities. To this end, UCY seeks to create the necessary conditions that will encourage and respect diversity and ensure dignity both in the workplace and society at large. Moreover, UCY has adopted specific policies to promote equal opportunities, as well as respect and understanding of diversity, while it is committed to promoting and maintaining a working, teaching, and learning environment, free from any form of discrimination, whether direct or indirect.

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