

KIOS RESEARCH AND INNOVATION CENTER OF EXCELLENCE

Research Associate/ Research Engineer – Smart EV Charging and Energy Optimization

Title	: Special Scientist for Research (Research Associate, Research Engineer I)
No. of Positions	: Two (2)
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 two (2) full-time positions of Special Scientists for Research. The successful candidates will provide technical and research support on the project SmartEVCharge, that will involve **developing and implementing optimization algorithms for the integration of electric vehicle (EV) charging, battery storage, and renewable energy sources (RES)** into smart charging stations. The successful candidates will contribute to developing **intelligent decision-making algorithms** that optimize the operation of EV charging stations, **maximizing monetary gain, reducing charging costs, and enhancing grid support and RES utilization**.

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 society and the environment, not only on a local but also on a global scale.

In KIOS we strive to create a multicultural, diverse, and inclusive workplace and we strongly support the continuous personnel evolvment 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.

Job Details

The successful candidates are expected to:

Key Responsibilities

- Develop **optimization algorithms** for managing EV charging, battery storage, and RES production.

- Implement **control strategies** for integrating EV chargers, battery energy storage systems, and photovoltaic generation.
- Design and test **pricing schemes** that align with market electricity prices, grid conditions, and user demand patterns.
- Apply **mathematical programming, machine learning, and AI techniques** for optimizing EV charging operations.
- Simulate and validate algorithms in **software environments such as Python, MATLAB, or Julia**.
- Develop **power systems simulation models** to enable **digital twins** for **hardware in the loop** and **what-if** investigations.
- Contribute to **real-world pilot testing and validation** of developed algorithms in collaboration with project partners.
- Participate in **project meetings, technical reporting, and academic publications**.

The required skills and expertise for the announced position include the following:

- Background in **optimization algorithms, mathematical modeling, and control theory**.
- Experience with **power system modeling and optimization, EV charging management, and renewable energy integration**.
- Proficiency in **Python, MATLAB, or Julia** for numerical simulation and optimization.
- Familiarity with **AI techniques, reinforcement learning, or predictive analytics** is a plus.
- Proficiency in **power systems simulation tools** (e.g., MATLAB/Simulink, DlgSILENT PowerFactory) and experience with **real-time simulation platforms** (e.g., OPAL-RT, RTDS) are considered an advantage.
- Experience with **industrial communication protocols** (e.g., OCPP, Modbus, MQTT) is an advantage.

Profile of the ideal candidate:

- Attention to detail
- Problem solver with strong analytical skills
- Independent and self-motivated, with the ability to work in a team-oriented research environment.
- Reliable and trustworthy
- Flexible and eager to learn
- Able to adapt to a fast-paced dynamic environment
- Have good communication, organizational and self-management skills
- Very good knowledge of the English language

Qualifications and Experience:

- **Bachelor, Master or Ph.D. degrees in Electrical Engineering, Computer Science, Operations Research, or a related field** from an accredited institution.

Employment Terms:

The position is on a contract basis. Initially, a one-year contract will be offered, with a 6-month probation period, which is renewable based on performance. The gross monthly salary depends on the candidate's qualifications and experience and will be between €2200 – €3200 for the Research Associate position and €1500 - €2500 for the Research Engineer position. From this amount, employee contributions to the Cyprus government funds will be deducted. A 13th salary bonus is incorporated into 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:

<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
- Summary of prior work experiences, activities, and accomplishments (can be combined with the cover letter) (1 page)
- A detailed curriculum vitae in English
- Copies of transcripts of BSc/MSc/PhD or other degree(s)
- Copy of an English language certificate
- Identify at least two referees who can provide reference letters

The applications should be submitted as soon as possible, but not later than **Friday, 27th of June 2025, 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 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 Center of Excellence, by phone at +357 22893460 or via e-mail at kioshiring@ucy.ac.cy.