University of Cyprus
Department of Electrical and Computer Engineering

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

Special Scientist (Research Fellow) in Power Systems (R2D2 Project)

Title: Special Scientist (Research Fellow) in Power Systems (R2D2 Project)

No. of positions: Two (2)

Category: Employment Contract

Location: Department of Electrical and Computer Engineering, University of Cyprus, Nicosia, Cyprus

The Department of Electrical and Computer Engineering at the University of Cyprus announces two (2) Special Scientist (Research Fellow) positions for full-time employment based on a contract for 24 months. The successful candidates will conduct research in the Horizon Europe "Reliability, Resilience and Defense technology for the griD" (R2D2) project under the supervision of Assistant Professor Mathaios Panteli.

The R2D2 project, funded by the European Union, aims to improve the resilience and reliability of current EPES (Electrical Power and Energy Systems) against a growing number of threats and vulnerabilities that may affect such critical infrastructure, exposing weaknesses with harmful and damaging effects on different stakeholders and final customers. This will be done through the deployment of several tools dedicated to the prevention, protection and restoration of EPES in two different independent but complementary scenarios in the energy value-chain – from regional coordination between TSOs, to privacy of LV customers.

Within the R2D2 project, the successful candidates will work on the development of spatial and temporal cascading modelling algorithms for the resilience quantification of EPES, as well as on the development of resilience-informed investment and operational planning to mitigate or prevent cascading effects. Hence, the required skills and expertise for the available positions include one or more of the following areas:

- Power systems security assessment, with focus on the development and application of cascading simulators for quantifying the effect of large disturbances.
- Investment and operational planning of power systems, with focus on the quantification of the role of flexibility solutions, such as automatic decentralized control of distributed energy resources, network reconfiguration, preventive/corrective islanding, demand response and mobile resources.
- Technical proficiency in multi-criteria decision-making and optimization techniques, with experience in relevant optimization software packages.

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 67th 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 its 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.

Job Details

Duties and Responsibilities

The successful candidates will be responsible to conduct fundamental and/or applied research in the area of power systems reliability and resilience assessment and enhancement. Depending on their qualifications and expertise, they will be responsible to prepare reports and project deliverables, contribute to the preparation of research proposals, and assist in the supervision of undergraduate students. Furthermore, they are expected to publish their research results in top international conferences and journals.

Profile of the ideal candidate

The ideal candidates must be able to work independently and/or in a team in fundamental and/or applied research, typically in the context of research and/or innovation projects. They must be able to produce, publish, and present research results in high quality conferences and journals and/or engage in innovation activities and transfer of knowledge, be able to prepare reports and project deliverables, attend academic and/or other conferences and seminars for further personal and professional development, assist in the preparation of research and/or innovation proposals, present periodically the progress of their research, and assist in the training, education, and dissemination activities of the Department of Electrical and Computer Engineering.

Qualifications and Experience

- Bachelor's or/and Master's Degree in Electrical Engineering or Computer Engineering or a related field from an accredited institution
- Doctorate degree or equivalent in the subject areas directly related to Electrical Power Systems or Engineering and Technology, or other related field from an accredited institution

Employment Terms

The positions are on a contract basis for 24 months. The maximum monthly gross salary is up to €2600 depending on the qualifications and experience of the successful candidate. The 13th salary bonus is incorporated in the monthly salary. Maternity leave will be granted according to Maternity Protection Law 1997(N.100(I)/1997), and the existing amendment laws. Travel allowance strictly for the purposes of the project will also be provided.

Application

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

- Cover letter that specifies their employment availability date
- Short description of their academic and research experiences (can be combined with the cover letter) (1-page maximum)

- A detailed curriculum vitae in English or in Greek
- Copies of degrees and transcripts of BSc/MSc/PhD degree(s)
- The names and contact information of at least two academics from whom references may be requested

The applications should be submitted as soon as possible, but not later than **Friday, 25 November 2022, at 5pm**. The evaluation of the applications will begin immediately. For more information, please contact Dr. Mathaios Panteli (panteli.mathaios@ucy.ac.cy).

At least the best three candidates that satisfy the required qualifications, will be interviewed by a 3-member Committee.

Candidates shall be informed of the result of their application by the relevant entity.

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.