



KIOS RESEARCH AND INNOVATION CENTER OF EXCELLENCE

Research and Innovation Positions

Title	: Research Associate, Post-Doctoral Researcher
No. of Positions	: Ten (10)
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 ten (10) research positions, for full-time employment. The successful candidates will conduct research under multiple KIOS projects funded by the European Union, including the flagship KIOS CoE Teaming project, as well as national or industry-funded projects.

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

- Monitoring, Control and Security of Critical Infrastructure Systems including Power Systems, Smart Water Networks, Intelligent Transportation Systems, Telecommunication Networks and Smart Buildings (4 positions)
- Autonomous Multi-Agent Systems, Unmanned Air and Terrestrial Vehicles, Emergency Response Technologies (1 Position)
- Cyber-Physical Security, Dependability and Fault-Diagnosis (2 Position)
- Machine Learning, Optimization, Intelligent Control, (2 Positions)
- Embedded and Real-Time Systems, Edge Computing, IoT Technologies (1 Position)

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 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.



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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.

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 candidate will be responsible to conduct fundamental and/or applied research and/or engage in innovation and entrepreneurship activities in the area of Information and Communication Technologies, with emphasis on the Monitoring, Control, Security of Critical Infrastructure Systems. Depending on their qualifications and expertise, successful candidates 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, successful candidates will be encouraged to publish their research results in international conferences and journals.

Profile of the ideal candidate:

The ideal candidate 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. The



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ideal candidate 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 for KIOS CoE project(s), 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 to KIOS personnel the progress of their research, and assist in the training, education, and dissemination activities of the KIOS CoE.

Qualifications and Experience:

- Bachelor's or/and Master's Degree in Electrical Engineering or Computer Engineering or Computer Science or a related field from an accredited institution
- Doctorate degree or equivalent in the subject areas directly related to Information and Communication Technologies **or** Engineering and Technology **or** Natural, Applied and Social sciences.

Employment Terms:

The position is on a contract basis. Initially, a one-year contract will be offered but this is renewable based on performance. The gross monthly salary depends on the candidate's qualifications and expertise and will be between €1900 - €3100. 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 that specifies their employment availability date as well as the research area that they apply to (a candidate may apply in more than one area)
- 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 transcripts of BSc/MSc/PhD degree(s)
- At least two reference letters, uploaded directly from the referees

The applications should be submitted as soon as possible, but not later than **Friday, 13th of November 2020, at 5 pm**. The evaluation of the applications will begin immediately. For more information, please contact the KIOS Center of Excellence, by phone at +357 22893460 or via e-mail at kioshiring@ucy.ac.cy.

Job Description

Job title	<i>Research Associate</i>
Supervisor- once-removed	<i>Academic Faculty</i>
Reports to	<i>Academic Faculty or/and Research Faculty or/and Senior Research Associate</i>
Position Type	<i>Full time</i>

Job purpose

Conduct fundamental and/or applied research and/or engage in innovation and entrepreneurship activities in the area of Information and Communication Technologies with emphasis on the Monitoring, Control, Security and Management of Critical Infrastructure Systems. Prepare research and/or innovation proposals and support KIOS CoE for achieving its strategic objectives.

Duties and responsibilities

	Time allocation (%)
Work independently and/or in a team in fundamental and/or applied research, typically in the context of research and/or innovation projects	43 – 53
Produce, publish and present research results in high quality conferences and journals and/or engage in innovation activities and transfer of knowledge	20 – 30
Engage in the preparation of research and/or innovation proposals	20 – 30
Manage projects and prepare reports and project deliverables	
Supervise or co-supervise undergraduate students and/or junior researchers	10 – 15
Attend academic and/or other conferences and seminars for further personal and professional development and/or engage in networking activities of the KIOS CoE	5 – 10
Present periodically to KIOS personnel the progress of your research	2 – 5
Assist in the training, education and dissemination activities of the KIOS CoE	0 – 5

**Note: the allocation of time on duties and responsibilities may change upon agreement with the Supervisor*

Qualifications and Education Requirements

- Bachelor’s or/and Master’s Degree in Electrical Engineering or Computer Engineering or Computer Science or a related field from an accredited institution
- Doctorate degree or equivalent in the subject areas directly related to Information and Communication Technologies **or** Engineering and Technology **or** Natural and Applied sciences.

Knowledge

- Engineering and Technology: advanced knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services **and/or**
- Information and Communication Technologies: advanced knowledge in technical fields used to handle digital information and communication **and/or**
- Natural and Applied sciences: advanced knowledge of physics and/or mathematics and/or biology and their theoretical and practical applications **and**
- English language: advanced knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Skills

Note: Skills are learned behaviors that can be acquired through training and are necessary in order to be able to carry out one or more job functions. Skills can be developed and improved over time, by combining abilities and knowledge. All skills listed below are important; the categorization was based on the job analysis procedure and provides a better understanding of what this position requires.

	Importance (*)
Analytical: collect and analyze information, solve problems and make decisions	*****
Technical: practical skills and knowledge needed to perform specific mechanical, information technology, mathematical or scientific tasks	*****
Self-Management: take responsibility of your own behavior and make your own contribution	*****
Team-working: the process of working collaboratively with a group of people in order to achieve a goal	****
Organizational: organize and manage your time, energy and resources in an effective way for achieving goals and objectives	****

Communication & Interpersonal: convey or share information, ideas and feelings effectively	****
Project Coordination: apply tools, skills and techniques to project activities to meet the project requirements	***
Leadership: skills in delegating, motivating and communicating effectively when leading a team	***

**Where 5 stars: essential, 4 stars: extremely important and 3 stars: very important*

Abilities

Note: Abilities are natural or inbuilt, can be improved and they are essential for the development of a skill. All abilities listed below are important; the categorization was based on the job analysis procedure and provides a better understanding of what this position requires.

	Importance (*)
Self-discipline – the ability to focus on completing the tasks effectively and efficiently without external stimulus	*****
Professionalism – the ability to demonstrate a commitment to carrying out responsibilities and an adherence to ethical principles	*****
Critical thinking – using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems	*****
Dependability – the quality of being reliable and trustworthy	*****
Oral comprehension – the ability to listen to and understand complex information and ideas presented in English through spoken words and sentences	*****
Written comprehension – the ability to read and understand complex information and ideas presented in English writing	*****
Self-motivation – the drive to initiate and complete what needs to be done without external stimulus from other people or situations	*****
Deductive reasoning – ability to form and defend independent conclusions	****
Creativity, innovation and originality – the capability or act of conceiving and implement something new or/and unique	****

Initiative – ability to evaluate, select and act on various methods and strategies for solving problems and meeting objectives before being asked or required to do so	****
Work under pressure – the ability to respond and perform effectively when put under stressful situations	****
Time-management – ability to prioritize tasks and manage effectively your own time	****
Networking - the ability to build relationships and networks inside and outside of KIOS CoE	***
Judgement and decision-making – Considering the relative costs and benefits of potential actions to choose the most appropriate one.	***

**Where 5 stars: essential, 4 stars: extremely important and 3 stars: very important*

Additional Notes (if any)

No additional notes.

Direct reports

No direct reports.

Approved by:	<i>Executive Committee</i>
Created by:	<i>Human Resource Management Team</i>
Date approved:	<i>02/10/2019</i>
Reviewed:	-
Version	<i>1.0</i>

Job Description

Job title	<i>Post-doctoral Researcher</i>
Supervisor- once-removed	<i>Academic Faculty</i>
Reports to	<i>Academic Faculty or/and Research Faculty or/and Senior Research Associate</i>
Position Type	<i>Full-time</i>

Job purpose

Conduct fundamental and/or applied research and/or engage in innovation and entrepreneurship activities in the area of Information and Communication Technologies with emphasis on the Monitoring, Control, Security and Management of Critical Infrastructure Systems in order to produce knowledge and simultaneously promote KIOS CoE.

Duties and responsibilities

	Time allocation (%)
Work independently and/or in a team in fundamental and/or applied research, typically in the context of research and/or innovation projects	55-65
Produce, publish and present research results in high quality conferences and journals and/or engage in innovation activities and transfer of knowledge	33-43
Prepare reports and project deliverables for KIOS CoE project(s)	5-15
Attend academic and/or other conferences and seminars for further personal and professional development	5-10
Assist in the preparation of research and/or innovation proposals	0-10
Present periodically to KIOS personnel the progress of your research	2-5
Assist in the training, education and dissemination activities of the KIOS CoE	0-5

**Note: the allocation of time on duties and responsibilities may change upon agreement with the Supervisor*

Qualifications and Education Requirements

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

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Knowledge

- Engineering and Technology: advanced knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services **and/or**
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- Natural and Applied sciences: advanced knowledge of physics and/or mathematics and/or biology and their theoretical and practical applications **and**
- English language: advanced knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Skills

Note: Skills are learned behaviors that can be acquired through training and are necessary in order to be able to carry out one or more job functions. Skills can be developed and improved over time, by combining abilities and knowledge. All skills listed below are important; the categorization was based on the job analysis procedure and provides a better understanding of what this position requires.

	Importance (*)
Analytical: collect and analyze information, solve problems and make decisions	*****
Technical: practical skills and knowledge needed to perform specific mechanical, information technology, mathematical or scientific tasks	*****
Self-Management: take responsibility of your own behavior and make your own contribution	*****
Organizational: organize and manage your time, energy and resources in an effective way for achieving goals and objectives	****
Communication & Interpersonal: convey or share information, ideas and feelings effectively	***
Team-working: the process of working collaboratively with a group of people in order to achieve a goal	***

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Abilities

Note: Abilities are natural or inbuilt, can be improved and they are essential for the development of a skill. All abilities listed below are important; the categorization was based on the job analysis procedure and provides a better understanding of what this position requires.

	Importance (*)
Self-discipline – the ability to focus on completing the tasks effectively and efficiently without external stimulus	*****
Critical thinking – using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems	*****
Dependability – the quality of being reliable and trustworthy	*****
Self-motivation – the drive to initiate and complete what needs to be done without external stimulus from other people or situations	*****
Oral comprehension – the ability to listen to and understand complex information and ideas presented in English through spoken words and sentences	*****
Written comprehension – the ability to read and understand complex information and ideas presented in English writing	*****
Professionalism – the ability to demonstrate a commitment to carrying out responsibilities and an adherence to ethical principles	****
Initiative – ability to evaluate, select and act on various methods and strategies for solving problems and meeting objectives before being asked or required to do so	****
Selective attention – the ability to concentrate on a task over a period of time without being distracted	****
Work under pressure – the ability to respond and perform effectively when put under stressful situations	****
Deductive reasoning – ability to form and defend independent conclusions	****
Creativity, innovation and originality – the capability or act of conceiving and implement something new or/and unique	***

**Where 5 stars: essential, 4 stars: extremely important and 3 stars: very important*

Additional Notes (if any)

A post-doctoral researcher can stay in KIOS CoE for an estimated expected time of 2-3 years. However, if in agreement with his/her Supervisor, both parties decide to extend their cooperation then post-doctoral researcher takes the title “Research Associate” and the relevant job description with different duties and responsibilities.

Direct reports

No direct reports.

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Created by:	<i>Human Resource Management Team</i>
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