

Post-doctoral Researchers and PhD Students

Company:
University of Nicosia

Location:
Cyprus / Nicosia

Discipline:
Data Management / Big Data, Cryptography, Artificial Intelligence, Distributed Ledger Technologies / Blockchain Technologies, Societal Aspects of Technology

Employment Type:
Post-doctoral Researchers and PhD Students

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Contact Person:
If you wish to apply for this position, please specify that you saw it on AKADEUS.

Call for Post-doctoral Researchers and PhD Students (Institute For the Future - IFF)

The University of Nicosia (UNIC) is the largest university in Cyprus and the largest in Southern Europe that teaches primarily in English, with more than 12,000 students from over 70 countries, a diverse community of faculty and staff, and an expanding worldwide network. UNIC is driving educational innovation in the wider region, with activities like our dynamic global initiative in blockchain technology and centres of excellence in medicine and online/distance learning. UNIC is ranked among the top 100 universities in the Emerging Europe and Central Asia Region for 2019 by QS World University Rankings.

Job Purpose

The Institute For the Future (IFF) is a cross-disciplinary research institute at UNIC, pursuing world-class research and education at the intersection of exponential technologies, including blockchain, artificial intelligence and augmented/virtual reality. IFF hosts more than 40 faculty, researchers and support staff from UNIC and partner institutions and, among other activities, runs the world's first full academic program in blockchain education since 2014 (MSc in Digital Currency, <https://digitalcurrency.unic.ac.cy>), hosts a large number of research projects funded by the European Commission and industry, and organizes Europe's premier annual business blockchain and crypto-currency conference (Decentralized, <https://www.decentralized.com>).

IFF is looking to fill a number of funded positions for **post-doctoral researchers** and **doctoral (PhD) students** in the area of **Distributed Ledger Technologies (DLTs)**, including Blockchains and crypto-currencies. Researchers and doctoral candidates will join a dynamic and fast-growing team of faculty and research staff at IFF, working on technological, business, financial, regulatory or societal impacts of DLTs/ Blockchains and crypto-currencies. The chosen candidates will join existing and new teams working on research projects funded by the European Commission ([e.g.](#), Horizon2020, Erasmus+ and other research programs) and corporate sponsors.

Further, doctoral candidates will be enrolled into the University of Nicosia's PhD program, working towards their doctoral degree under the supervision of one or more IFF faculty.

Main Accountabilities

- Pursuing state-of-the-art research on DLTs/ Blockchains and crypto-currencies.
- Working with project teams in research projects, funded by industry or the European Commission.
- Publication of research findings.
- Pursuing PhD studies (for doctoral candidates only).

Indicative List of Topics

Applications are sought from candidates working or aspiring to pursue research in the following topics (the list is indicative; additional related topics will also be considered)

Societal Aspects of Technology

- The long-term impact of technology to all aspects of our lives and societies
- Societal and ethical implications of emerging technologies ([e.g.](#), human trafficking, human rights)
- Emerging technologies for sustainable growth and development
- Integration of blockchain, artificial intelligence and the Internet of Things
- Intelligence augmentation (IA) and its potential to keep humans ahead of artificial intelligence
- Legal and Regulatory Aspects of Crypto-currencies, Blockchain & Smart Contracts

Distributed Ledger Technologies/ Blockchain Technologies

- Blockchain based applications ([e.g.](#), supply chain, energy, healthcare)
- Scalability on blockchain and consensus algorithms
- Cross-blockchain interoperability ([e.g.](#), sidechains, off-chain settlement networks)
- Distributed autonomous organizations
- New forms of industrial organisation enabled by decentralised P2P networks ([e.g.](#), distributed autonomous organisations)
- Programmable trust ([e.g.](#), P2P money, smart contracts, oracles)
- Human-to-machine and machine-to-machine commerce
- Blockchains versus traditional databases

Artificial Intelligence

- Forecasting and forecasting competitions
- Artificial intelligence
- Pattern recognition and machine learning
- Learning from multi-label data
- Deep learning

Cryptography

- Symmetric cryptanalysis (linear and differential attacks)
- Algebraic geometry
- Solving NP problems using SAT solvers-based techniques
- Ring signatures and privacy-preserving crypto primitives

Data Management / Big Data

- Data integration, linked data and semantic web
- Data stream mining
- Big data with machine learning analytics

Requirements

- **For *post-doctoral* researchers:**
 - You have obtained a PhD degree: all backgrounds will be considered, including Computer Science, Information Systems, Engineering, Mathematics, Business, Economics, Finance, Law, Social Sciences.
 - You are motivated to develop and/or exploit new research directions.
 - You have a record of academic publications in journals and/or conferences.
- **For *PhD students*:**
 - You have obtained an MSc/MA degree: all backgrounds will be considered, including: Computer Science, Information Systems, Engineering, Mathematics, Business, Economics, Finance, Law, Social Sciences.
 - You are motivated to develop and/or exploit new research directions.
 - A record of academic publications will be considered an advantage.
- **For all candidates:**
 - You have strong analytical skills and the ability to work independently, as well as, in a team.
 - You have excellent written and oral communication skills in English.
 - (If you are applying for technology-oriented research) You have good programming skills ([e.g.](#), Python, Java or C++) and have acquired some experience in blockchain programming ([e.g.](#), Solidity).

Please submit your CV accompanied by a Cover Letter through our online recruitment system <http://vacancies.unic.ac.cy/>

For any enquiries contact Dr Klitos Christodoulou christodoulou.kl@unic.ac.cy, Institute For the Future (IFF) Research Manager.

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