

PhD Position – Machine Learning for Smart Cities [Funding Available]
(Computer Science Department – Artificial Intelligence Lab)



Ref.: CSAI11/19

The University of Nicosia (www.unic.ac.cy)

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 block-chain technology and centres of excellence in medicine, artificial intelligence and 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.

The Artificial Intelligence Lab (ailab.unic.ac.cy):

The AI Lab of the University of Nicosia aims at developing cutting edge technology as well as state-of-the-art research on the fields of Artificial Intelligence, Machine Learning, and Data Science. It consists of professors, Post-Doctoral researchers, PhD Students, as well as undergraduate students that conduct research and collaborate on projects related to a plethora of challenging topics like: Data Science (Data Stream mining, Deep Learning), Artificial Intelligence (Machine Learning, Uncertain Reasoning, Bayesian Networks), Smart Cities (Learning from Urban Data), Computational Social Science, Sentiment Analysis, Social Network Analysis and Big Data (Cloud Computing, Distributed Systems, IoT). The team focuses on interdisciplinary topics working with external collaborators from Political Science, Social Science, Journalism and Health. In addition to the research goals the group provides high-quality teaching on relevant topics (e.g. Artificial Intelligence, Data Mining, Machine Learning).

Position Description

The AI Lab is looking for enthusiastic candidates to work on the topic of Machine Learning and its applications to smart cities and autonomous driving systems. More specifically, the candidate will enrol to the PhD program of the University of Nicosia under the supervision of the professors of the AI Lab. The candidate will conduct research at the area of Machine Learning from sensor data in smart cities. Computer Vision and Machine Learning methodologies like Deep Learning, Classification, Clustering, Anomaly Detection will have to be explored and extended in order to be effectively applied in the smart city setting where the data are available in large volume but are many times incomplete, noisy and heterogeneous. The candidate should look at topics like traffic management, driver behaviour, emergency response and infrastructure optimization by developing novel, effective and efficient Computer Vision and

Machine Learning methods. Different Machine Learning areas should be explored and possibly combined like Computer Vision, Mining Big Data Streams, Speech Recognition, Anomaly Detection and more.

Funding

Depending on the background and the skillset of the candidate, this project and the PhD can be funded through collaborations with the AI Lab's industry partners and the involvement of the candidate to available European Commission (H2020) grants. Depending on her/his qualifications the candidate will also have the option to work as a Teaching Assistant in UNIC's offered courses.

Main Responsibilities

- Conducting state-of-the-art research (experiments, theoretical analysis) on Machine Learning in Smart Cities.
- Working with teams in research projects, funded by the industry, the European Commission and other funding agencies.
- Publication of research findings.
- Authoring papers, reports, project deliverables and research proposals.
- Pursuing a PhD degree.

Qualifications Required

- A BSc in Computer Science, Computer Engineering, Information Systems, Mathematics, Statistics, or relevant fields.
- An MSc in relevant fields will be a plus.
- Strong analytical skills and the ability to work independently, as well as, in a team.
- Excellent written and oral communication skills in English.
- Programming skills (Python, C/C++, R, Matlab or any other language)
- Experience in Research projects and especially H2020 will be an advantage

More information

For more information related to the position please contact Dr Ioannis Katakis at katakis.i@unic.ac.cy

Deadline

Please submit your application before December 20, 2019, 23:00. Applications will be reviewed as soon they are received.

Submit your application

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

Only short-listed candidates will be notified.