National Technical University of Athens

Department of Transportation Planning and Engineering

The Department of Transportation Planning and Engineering (DTPE) at the National Technical University of Athens (NTUA) researches and develops cutting-edge technologies in transportation engineering. It is composed by three Laboratories, offers 21 undergraduate courses at the School of Civil Engineering, and contributes to another 8 undergraduate and postgraduate courses at NTUA Engineering Schools. In the last 37 years has produced highly innovative research through more than 1.134 Diploma Theses, 60 PhD Theses and within more than 330 National, European and International Research Projects.

DTPE has an immediate opening for a

PhD Candidate

in Data Science and Operations Research in Transportation Engineering [ref: 2023-CONDUCTOR-3]

The Department of Transportation Planning and Engineering at the National Technical University of Athens is looking for a PhD Candidate to support the developments of the EU H2020 project CONDUCTOR that started on **November 1st, 2022** and will end on **October 31st, 2025**. Your work will include aspects of science, engineering and business analysis. It will be closely coupled with DTPE's efforts in Intelligent Transportation Systems and Artificial Intelligence. As a PhD candidate, you will work in a multi-cultural, interdisciplinary team including partners from EU universities (TU Munich, University of Twente, DEUSTO, Jožef Stefan Institute) and leading companies in transportation engineering/computer science (i.e., AIMSUN, INTRASOFT).

As PhD Candidate you will work on the cross-section between application domains (with an initial focus on Public Transport and Fleet Management) and computer platforms. Your responsibilities will include:

- leveraging the increasing availability of public transport data to infer more sophisticated trends which until now have been difficult to obtain and utilize.
- developing optimization and/or machine learning techniques for public transport control in close collaboration with the Athens Mass Transit System (OASA).
- establishing a detailed modelling plan to address issues of data processing and analysis for stream data coming from smartphone sensors.
- collaborating with inter-disciplinary & multi-cultural teams.

English is the working language in the department.

Please send your application with your CV by **Feb 20, 2023** electronically at kgkiotsalitis@civil.ntua.gr and elenivl@mail.ntua.gr with reference to **[2023-CONDUCTOR-3].**

Desired Skills and Experience

- Ability to work in inter-disciplinary teams with a positive, can-do attitude.
- Excellent written and spoken communication skills in English.
- Expert knowledge in computational sciences
- Expert knowledge in mathematics.
- Strong proficiency in Python or Matlab.
- Undergraduate degree in Engineering or Mathematics recognized by the Hellenic National Academy Recognition and Information Center (DOATAP)

The following skills are a plus

- Knowledge of Greek.
- Knowledge of Operations Research.
- Knowledge of Machine Learning.
- Experience in writing Scientific Reports and Technical Reports in English.

We are looking for individuals with a broad background in mathematics, computer science or engineering. An MSc in Computational Mathematics, Transportation Engineering or a related field is usually expected.

For questions, please contact:
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