

EUROPEAN
CURRICULUM VITAE
FORMAT



PERSONAL INFORMATION

Name **MARKOU, IOULIA**
Address **Virum Stationsvej 141D
2830 Virum
DENMARK**
Telephone **00 + 45 4525 1515**
Mobile **00 + 45 8191 0356**
E-mail **markou@dtu.dk**

Nationality Hellenic

Date of birth 20 MAY 1989
Gender Female

EDUCATION AND TRAINING

- Dates December 2015 - today
- Name and type of organisation providing education and training **DTU - TECHNICAL UNIVERSITY OF DENMARK**
Transport Modelling
- Principal subjects/occupational skills covered Ph.D. Candidate
Project: *Machine Learning and Mobility*
Non-recurrent events' detection and explanation using internet data. Use of machine learning techniques in the impact prediction of similar events and in optimization mechanisms of demand-supply alignment.

- Dates 2012 - 2014
- Name and type of organisation providing education and training **National Technical University of Athens, Greece**
- Principal subjects/occupational skills covered Analytical and Statistical Methods in Geoinformatics, Urban and Regional Planning using GIS, Spatial Databases, Telematics Applications in Transportation Infrastructure

Master Thesis: Calibration of traffic simulation models using SPSA

- Title of qualification awarded MS in Geoinformatics. Mark 9.50/10.
- Dates 2007– 2012
 - Name and type of organisation providing education and training **National Technical University of Athens, Greece**
 - Principal subjects/occupational skills covered Rural and Surveying Engineering
Transportation Engineering

Traffic and Highway Engineering, Transportation Systems, Highway Design and Operation (project-oriented course), Design of Transportation Facilities other than Highways and Principles of Transportation Economics, Components Of Road Construction Projects.

Diploma Thesis: Evaluation of pavement condition using Terrestrial Laser Scanning
- Title of qualification awarded Diploma (5-year) in Rural and Surveying Engineering. Mark 8.74/10.
- Dates 2005 - 2007
 - Name and type of organisation providing education and training **15° High School of Athens, Greece**
- Title of qualification awarded High School Degree.

PUBLICATIONS

- Title Demand Pattern Analysis of Time Series for anomalies detection
- Authors Markou I., Rodrigues F. and Pereira F. (2017)
Proceedings of the 96th Annual Meeting of the Transportation Research Board, January 8-12, Washington, D.C., USA.
- Title Online calibration for microscopic traffic simulation and dynamic multi-step prediction of traffic speed
- Authors Papathanasopoulou, V., I. Markou and C. Antoniou (2016)
Transportation Research Part C: Emerging Technologies, 68, pp. 144-159.
- Title Applications of terrestrial laser scanning in transport
- Authors Markou, I., C. Antoniou, M. Tsakiri and A. Georgopoulos
Proceedings of the 7th International Congress on Transport Research in Greece, Hellenic Institute of Transportation Engineers, Hellenic Institute of Transport, Athens, November 2015.

- Title Efficient management of parking under constraints
- Authors Papathanasopoulou V., I. Markou, C. Antoniou, V. Gikas, A. Mpimis, H. Perakis and G. Yannis
Proceedings of the 7th International Congress on Transport Research in Greece, Hellenic Institute of Transportation Engineers, Hellenic Institute of Transport, Athens, November 2015.

- Title On-line calibration of car-following models exploiting input parameter correlation
- Authors Papathanasopoulou, V., I. Markou, and C. Antoniou
4th hEART Symposium (European Association for Research in Transportation – hEART), DTU, Denmark, 8-10 September, 2015.

- Title A demonstration of distribution-based calibration
- Authors Markou, I., V. Papathanasopoulou and C. Antoniou
Proceedings of Models and Technologies for Intelligent Transportation Systems (MT-ITS), Budapest, 3-5, June 2015

- Title Developing insight into effective SPSA parameters through sensitivity analysis
- Authors Markou, I. and C. Antoniou
Proceedings of Models and Technologies for Intelligent Transportation Systems (MT-ITS), Budapest, 3-5, June 2015

- Title Localization and driving behavior classification using smartphone sensors in the direct absence of GNSS
- Authors Antoniou, C., V. Gikas, V. Papathanasopoulou, C. Danezis, A. Panagopoulos, I. Markou, H. Perakis, D. Efthymiou and G. Yannis
Transportation Research Record: Journal of the Transportation Research Board, 2489, pp. 66-76.

- Title Practical Assessment of 3D Reconstruction Methodologies
- Authors Markou I. and Georgopoulos A.
World Cultural Heritage Conference - Euromed 2014, Lemessos-Cyprus
3-8 November 2014

- Title Monitoring indoor driver behavior using opportunistic smartphone sensor data.
- Authors Antoniou, C., V. Papathanasopoulou, V. Gikas, T. Mpimis, I. Markou and H. Perakis
ITS2014 - ITS and Smart Cities, Patras, November 19-21, 2014.

- Title Towards distribution-based calibration for traffic simulation
- Authors Antoniou C., Gikas V., Papathanasopoulou V., Mpimis T., Markou I. and Perakis H.
17th International IEEE Conference on Intelligent Transportation Systems, Qingdao, China, October 8-11, 2014.

- Title Localization and driving behavior classification using smartphone sensors in the direct absence of GNSS
- Authors Antoniou, C., V. Gikas, V. Papathanasopoulou, C. Danezis, A. Panagopoulos, I.

WORK EXPERIENCE

- Dates January 2015 – October 2015
 - Type of business or sector National Technical University of Athens, Greece
 - Main activities and responsibilities
 - Research Engineer
 - EMPARCO project - Efficient Management of Parking under Constraints
 - Microscopic parking facility simulation - Information generation and dissemination and control - Strategy generation for the optimal parking management schemes

- Dates November 2013 – May 2014
 - Type of business or sector Singapore MIT Alliance for Research and Technology (SMART)
 - Main activities and responsibilities
 - Research Engineer
 - Calibration of DynaMIT using the Singapore Expressway Network

- Dates July 2011
 - Type of business or sector Internship
 - Main activities and responsibilities
 - Development of concrete projects in documentation of heritage, at the San Prudencio's Monastery, Clavijo, La Rioja, Spain

- Dates August 2010 – July 2011
 - Name and address of employer Hellenic Telecommunications Organization (OTE S.A.)
99 Kifissias Ave., 15124 Maroussi, Athens, Greece
 - Occupation or position held Phone book information desk

- Dates June 2010 – July 2010
 - Type of business or sector Internship
 - Main activities and responsibilities
 - Topographic and Cadastral Survey on Nisyros Island, Greece

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE **GREEK**

OTHER LANGUAGES

	ENGLISH
• Reading skills	Excellent
• Writing skills	Excellent
• Verbal skills	Excellent

	GERMAN
• Reading skills	Basic
• Writing skills	Basic
• Verbal skills	Basic

	FRENCH
• Reading skills	Basic
• Writing skills	Basic
• Verbal skills	Basic

SKILLS AND COMPETENCES	<p>Very familiar with programming languages Matlab, Python and R. Very good use of transportation software (E.G. DYNAMIT, TRANSMODELER, AIMSUN), design software (Certification in 2D and 3D AutoCAD), Geographic Information Systems (e.g. Arcmap, Quantum GIS) and laser scanners software (e.g. Cyclone, Geomagic, Surfer, CloudCompare). Good use of database management systems (PostgreSQL, MySQL)</p>
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AWARDS AND SCHOLARSHIPS

2014 - 2015	EUGENIDES FOUNDATION SCHOLARSHIP FOR POSTGRADUATE STUDIES
2013 - 2014	EUGENIDES FOUNDATION SCHOLARSHIP FOR POSTGRADUATE STUDIES
2012	HELLENIC TELECOMMUNICATIONS ORGANIZATION (OTE S.A.) HIGH AVERAGE SCORE IN UNDERGRADUATE COURSES OF THE FACULTY OF RURAL AND SURVEYING ENGINEERING N.T.U.A.
2012	NATIONAL TECHNICAL UNIVERSITY OF ATHENS GRADUATING 2ND AMONG THE DEGREE HOLDERS OF THE FACULTY OF RURAL AND SURVEYING ENGINEERING N.T.U.A.
2009	XATZOPOULOS IOANNIS HIGHEST SCORE IN THE UNDERGRADUATE COURSES OF REPRESENTATIONAL GEOMETRY AND PROJECTIVE GEOMETRY

- 2008 PAPAKIRIAKOPOULOS CHRISTOS
HIGHEST SCORE IN THE UNDERGRADUATE COURSES OF MATHEMATICS
- 2008, 2009 STATE SCHOLARSHIPS FOUNDATION
HIGH AVERAGE SCORE IN UNDERGRADUATE COURSES OF THE FACULTY OF RURAL AND
SURVEYING ENGINEERING N.T.U.A.
- 2007 BANK EUROBANK ERGASIAS S.A.
HIGHEST AVERAGE SCORE IN GREEK NATIONAL EXAMS AMONG ALL STUDENTS IN HIGH
SCHOOL
- 2005 - 2007 HELLENIC TELECOMMUNICATIONS ORGANIZATION (OTE S.A.)
HIGH AVERAGE SCORE IN HIGH SCHOOL