

PERSONAL INFORMATION

Marios Tzouvaras



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Sex Male | Date of birth 03/01/1983 | Nationality Greek

WORK EXPERIENCE

Jan 2014–Present

Special Scientist

Cyprus University of Technology, Limassol (Cyprus)

- Lecturing for the module of Transport Planning at the Department of Civil Engineering and Geomatics (part of the 3rd year of the undergraduate course of Civil Engineering)
- Prepared notes, handouts and presentations for the module.

Business or sector University / Teaching

Oct 2013–Dec 2019

Teaching Assistant

Cyprus University of Technology, Limassol (Cyprus)

- Assisting in lectures at the undergraduate and MSc courses at the Department of Civil Engineering and Geomatics (Remote Sensing, Geodesy I, II, III, etc.)

Business or sector University / Teaching

Nov 2012–Present

Research Associate

Cyprus University of Technology, Limassol (Cyprus)

Employed in the following research projects in descending order starting from the most recent one:

- **EXCELSIOR (Horizon 2020):** ERATOSTHENES: Excellence Research Centre for Earth Surveillance and Space-Based Monitoring of the Environment (<https://excelsior2020.eu/>)
- **CyCLOPS (RPF):** Cyprus Continuously Operating Natural Hazards Monitoring & Prevention System (<https://cyclops-rpf.eu/>)
- **CopHub.AC (Horizon 2020):** Copernicus Academy Hub for Knowledge, Innovation and Outreach (<http://www.cophub-ac.eu/>)
- **ARINFUSE (ERASMUS+):** Infusing skills & Exploiting the potential of the Augmented Reality technologies within the utility network sector (<https://www.arinfuse.eu/>)
- **THAL-CHOR 2 (ΘΑΛ-ΧΩΡ 2-INTERREG V-A):** Transboundary Cooperation for Development of Marine Spatial Planning (<https://www.mspsygr2.info/>)
- **ATHENA (Horizon 2020):** Remote Sensing Science Center for Cultural Heritage (<https://athena2020.eu/>)
- **CLIMA (JPI-CH):** Cultural Landscape risk Identification, Management and Assessment (<http://www.clima-project.eu/>)
- **PROTHEGO (JPI-CH):** PROtection of European Cultural HEritage from GeO-hazards (<http://www.prothego.eu/>)
- **THAL-CHOR (ΘΑΛ-ΧΩΡ-INTERREG IV):** Transboundary Cooperation for Development of Marine Spatial Planning (<http://www.mspsygr.info/>)
- **INTRAPRISE (ERASMUS+):** Infusing entrepreneurial skills in the corporate ICT environment (<http://www.intraprise-project.eu/>)

- **MEDNET (MED Programme):** Mediterranean Network for Custom Procedures and Simplification of Clearance in Ports (<http://www.mednetproject.eu/>)

Participated in the writing and submission of numerous research project proposals in various calls, such as Horizon 2020, JPI, Erasmus+, ESA-PECS, Research Promotion Foundation, etc.

Business or sector University / Research

Dec 2007–Nov 2012

Site Engineer

Joannou & Paraskevaides (J&P) Overseas Ltd., Amman (Jordan)

- Working at their Jordan branch for the construction of Queen Alia International Airport in Amman
- Supervised the design and the rehabilitation stages of the terminal service roads, Taxiways, the construction of new Aprons (Infrastructure/Transport).
- Working for the construction of the Building Terminals in various stages such as earthworks, structural concrete works and finishing works
- Preparation of monthly evaluations for sub-contractors and costing for new works
- Developing Bar Bending Schedules as well as material schedules.

Business or sector Building Contractors

Oct 2006–Oct 2007

Transport Planner / Consultant

Ove ARUP International Ltd., London (United Kingdom)

- Responsible for the development of Transport Assessments
- Development of microsimulation transport models (VISSIM, LINSIG, TRANSYT)
- Identifying solutions for transportation planning problems throughout the UK as well as overseas
- Relevant projects: 1) The Heart of Doha, Regeneration of Inner Doha District, Qatar; 2) Project Centurion, City of London, UK; 3) Tesco Extension, Dereham, UK; 4) Olympic Park Loop Road, London, UK; 5) Parc1, Yeoido, South Korea, 6) One Hyde Park, London, UK, 7) Stratford High Street Overbridge, London, UK.

Business or sector Engineering / Consultancy Firm

Apr 2004–May 2005

Surveyor Assistant

Karoumpalis Surveying Office, Athens (Greece)

- Worked part-time dealing with surveying and cadastral information systems.

Business or sector Surveying Firm

EDUCATION AND TRAINING

Feb 2013–May 2020

PhD in Monitoring and Assessment of the Impact of Natural Hazards on Infrastructure Resilience using Earth Observation Techniques

Cyprus University of Technology, Limassol (Cyprus)

- SAR interferometry
- Coherent Change Detection
- Ground Deformation Monitoring
- Geo-hazards Monitoring
- Remote Sensing and GIS applications

Oct 2005–Sep 2006

MSc in Transport and DIC (Distinction)

Imperial College London and University College London, London (United Kingdom)

- Transport Planning
- Transport Demand and its Modelling
- Transport Engineering and Operations
- Transport Economics
- Transport Policy
- Highway Engineering,
- Design of Roads, Rail, Bridges, Tunnels and Embankments
- Public Transport
- Design of Accessible Transport Systems.

Sep 2000–May 2005

MEng in Rural and Surveying Engineering (8.14/10)

National Technical University of Athens (N.T.U.A.), Athens (Greece)

- Geodesy
- Remote Sensing
- Cadastral Surveying and LIS
- Cartography
- Urban and Regional Planning
- Highway Engineering
- Transport Planning Systems
- Railway Engineering
- Technical Mechanics
- Business Management
- Descriptive and Higher Geometry
- Probability Theory and Statistics
- Calculus I, Calculus II, Differential Equations, Numerical Analysis, Differential Geometry, Theory of Errors and Corrections
- Physics I, Physics II

PERSONAL SKILLS

Mother tongue(s) Greek

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Cambridge English: Proficiency (CPE) – C2					
German	A1	A1	A1	A1	A1
GOETHE-ZERTIFIKAT A1					

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

- Communication skills**
- Ability to interact and effectively communicate with people from diverse backgrounds, academia, labour force, etc.
 - Excellent written and verbal communication skills
 - Empathic listener
 - Confident, articulate, and professional speaking abilities
 - Speaking in public, to groups, or via electronic media (skype conferences, etc.).
 - Excellent presentation and negotiation skills

- Organisational / managerial skills**
- Excellent team-leading skills as site engineer, responsible for a team of 2 foremen and 100 workers
 - Able to lead others in high-demand situations
 - Supervising sub-contractors and their processes
 - Planning, budgeting, scheduling and setting milestones
 - Experienced in technical, financial and administrative management of research projects
 - Able to coordinate several tasks simultaneously
 - Record keeping
 - Highlighting teamwork
 - Motivating / mentoring
 - Problem solving

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital competences - Self-assessment grid

Computer Skills (IT):

ArcGIS, ESA SNAP, ERDAS IMAGINE, AutoCAD, ODOS Logismiki, VISSIM, LINSIG, Transyt, PRIMAVERA, Microsoft Office suite (Word, Excel, Powerpoint, Outlook, Project, etc.).

Driving licence B

ADDITIONAL INFORMATION

- Research Interests**
- SAR interferometry
 - Coherent Change Detection
 - Deformation monitoring
 - Natural Hazards monitoring
 - Remote Sensing
 - Geographic Information Systems for environmental surveillance / applications
 - Transport Planning (Design Issues, Transport Assessments, Transportation Forecasting, Trip Generation, Distribution, Modal Choice, Route Assignment, etc.)
 - Microsimulation Transport Models

Publications – Peer reviewed in Journals

- **Tzouvaras, M.**, Danezis, C. and Hadjimitsis, D. G. (2020). Differential SAR Interferometry Using Sentinel-1 Imagery-Limitations in Monitoring Fast Moving Landslides: The Case Study of Cyprus. *Geosciences* 2020, 10, 236. <https://doi.org/10.3390/geosciences10060236>
- **Tzouvaras, M.**, Danezis, C. and Hadjimitsis, D. G. (2020). Small scale landslide detection using Sentinel-1 interferometric SAR coherence. *Remote Sensing* 2020, 12(10), 1560. <https://doi.org/10.3390/rs12101560>
- **Tzouvaras, M.**, Kouhartsiouk, D., Agapiou, A., Danezis, C. and Hadjimitsis, D. G. (2019). The Use of Sentinel-1 Synthetic Aperture Radar (SAR) Images and Open-Source Software for Cultural Heritage: An Example from Paphos Area in Cyprus for Mapping Landscape Changes after a 5.6 Magnitude Earthquake. *Remote Sensing* 2019, 11(15), 1766. <https://doi.org/10.3390/rs11151766>
- Alexakis, D., Agapiou, A., **Tzouvaras, M.**, Themistocleous, K., Neocleous, K., Michaelides, S., and Hadjimitsis, D. G. (2014). Integrated use of GIS and remote sensing for monitoring landslides in transportation pavements: the case study of Paphos area in Cyprus. *Natural Hazards*, 72(1), 119–141. <https://doi.org/10.1007/s11069-013-0770-3>

Publications – Peer reviewed in Conferences

- Riedler, B., Lang, S., Miguel-Lago, M., Schroder, C., Politi-Stergiou, N., Kerschbaumer, M., Tramutoli, V. and **Tzouvaras, M.**, (2020). Copernicus knowledge and innovation hubs. In XXIV ISPRS Congress 2020 Proceedings, Nice, France. (Accepted)
- Hadjimitsis, D., Schreier, G., Kontoes, H., Ansmann, A., Komodromos, G., Themistocleous, K., Neocleous, K., Michaelides, S., Mamouri, R., Papoutsis, I., Bühl, J., Schwarz, E., Melillos, G., Tziortzis, S., Danezis, C., Nisantzi, A., Mettas, C., Papoutsas, C., **Tzouvaras, M.**, Evagorou, E., Agapiou, A., Miltiadou, M., Christofe, A., Prodromou, M., Loulli, E., Yfantidou, A., Alverti, M., Lysandrou, V., Polydorou, T., Kyriakidis, P., Kyriakides, N., Akylas, E., Anayiotos, A., Ambrosia, V., Maranesi, M., Zeil, P., Halounova, L., Barok, D., Cheli, S., (2020). The ERATOSTHENES Centre of Excellence (ECoE) as a Digital Innovation Hub for Earth Observation. In Detection and Sensing of Mines, Explosive Objects, and Obscured Targets XXV; Isaacs, J. C., Bishop, S. S., Eds.; SPIE; p 29. <https://doi.org/10.1117/12.2567070>.
- Danezis, C., Hadjimitsis, D., Eineder, M., Brcic, R., Agapiou, A., Themistocleous, K., Mendonidis, E., Christofe, A. and **Tzouvaras, M.** (2019). CyCLOPS: A Novel Strategic Research Infrastructure Unit for Continuous Integrated Spaced-based Monitoring of Geohazards. 4th Joint International Symposium on Deformation Monitoring (JISDM), 15-17 May 2019, Athens, Greece
- Hadjimitsis, D.G., Themistocleous, K., Evagorou, E., Michaelides, S., Christofe, A., Nisantzi, A., Neocleous, K., Papoutsas, C., Mettas, C., **Tzouvaras, M.**, Loulli, E., Kouta, G., Danezis, C., Lasaponara, R., Masini, N., Cerra, D., Schreier, G. and Papadavid G. (2018) Capitalize on the Experience of the ATHENA Project for Cultural Heritage for the Eratosthenes Centre of Excellence for the Benefit of the East Med Region. In: Ioannides M. et al. (eds) Digital Heritage. Progress in Cultural Heritage: Documentation, Preservation, and Protection. EuroMed 2018. Lecture Notes in Computer Science, vol 11196. Springer, Cham. https://doi.org/10.1007/978-3-030-01762-0_56
- Hadjimitsis, D.G., Agapiou, A., Lysandrou, V., Nisantzi, A., Christofe, A., **Tzouvaras, M.**, Papoutsas, C., Mamouri, R.E., Mettas, C., Evagorou, E., Themistocleous, K., Papageorgiou, N., Lasaponara, R., Masini, N., Biscione, M., Danese, M., Sileo, M., Krauss, T., Cerra, D., Gessner, U., Schreier, G. and Michaelides, S., (2018). Remote sensing archaeology knowledge transfer: examples from the ATHENA twinning project. Proc. SPIE 10793, Remote Sensing Technologies and Applications in Urban Environments III, 107930N. <https://doi.org/10.1117/12.2325532>
- Hadjimitsis D.G., Kontoes H., Schreier G., Ansmann A., Komodromos G., Themistocleous K., Mamouri R., Michaelides S., Nisantzi A., Papoutsas C., Neocleous K, Mettas C., **Tzouvaras M.**, Evagorou E., Christofe A., Melillos G., Papoutsis I., (2017). ERATOSTHENES: excellence research Centre for Earth surveillance and space-based monitoring of the environment, the EXCELSIOR Horizon 2020 teaming project. Proc. SPIE 10428, Earth Resources and Environmental Remote Sensing/GIS Applications VIII, 104280F. <https://doi.org/10.1117/12.2279500>
- Hadjimitsis D.G., Themistocleous K., Agapiou, A., Mamouri R., Nisantzi A., Papoutsas C., **Tzouvaras M.**, Neocleous K., Mettas C., Michaelides S., (2017). Ten years research activities in Earth observation at the Cyprus University of Technology. Proc. SPIE 10444, Fifth International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2017), 104441Q. <https://doi.org/10.1117/12.2292345>
- Hadjimitsis D.G., Kontoes H., Schreier G., Ansmann A., Komodromos G., Themistocleous K., Mamouri R., Michaelides S., Nisantzi A., Papoutsas C., Mettas C. and **Tzouvaras M.**, (2017). The Establishment of the EXcellence Research Centre for Earth Surveillance and Space-Based

Monitoring of the Environment (EXCELSIOR) for the Eastern Mediterranean Region. 15th International Conference on Environmental Science and Technology. CEST2017. Rhodes, Greece.

- Themistocleous, K., Cuca, B., Agapiou, A., Lysandrou, V., **Tzouvaras, M.**, Hadjimitsis, D. G., Kyriakides, F., Kouhartsiouk, D., Margottini, C., Spizzichino, D., Cigna, F., Crosta G., Frattini P. and Merodo, J. A. F. (2016). The protection of cultural heritage sites from geo-hazards: The PROTHEGO project. EUROMED 2016, 10059 Lecture Notes in Computer Science, 91–98. https://doi.org/10.1007/978-3-319-48974-2_11
- Cuca, B., **Tzouvaras, M.**, Agapiou, A., Lysandrou, V., Themistocleous, K., Nisantzi, A. and Hadjimitsis, D. G. (2016). Earth observation technologies in service to the cultural landscape of Cyprus: risk identification and assessment. Fourth International Conference on Remote Sensing and Geoinformation of the Environment (RSCy2016), 96880Y. <https://doi.org/10.1117/12.2241669>
- Hadjimitsis D., Agapiou A., Themistocleous K., Mettas C., Evagorou E., Papoutsas C., Nisantzi A., Mamouri R., **Tzouvaras M.**, Lysandrou V., Cuca B., Christofe A., Aliouris K. and Ioannou N., (2015). Resolving sea and land conflicts in Cyprus using Marine Spatial Planning. In 14th International Conference on Environmental Science and Technology, CEST 2015. Rhodes, Greece.

Research Projects

- **EXCELSIOR (Horizon 2020):** ERATOSTHENES: Excellence Research Centre for Earth Surveillance and Space-Based Monitoring of the Environment (<https://excelsior2020.eu/>)
- **CyCLOPS (RPF):** Cyprus Continuously Operating Natural Hazards Monitoring & Prevention System (<https://cyclops-rpf.eu/>)
- **CopHub.AC (Horizon 2020):** Copernicus Academy Hub for Knowledge, Innovation and Outreach (<http://www.cophub-ac.eu/>)
- **ARINFUSE (ERASMUS+):** Infusing skills & Exploiting the potential of the Augmented Reality technologies within the utility network sector (<https://www.arinfuse.eu/>)
- **THAL-CHOR 2 (ΘΑΛ-ΧΩΡ 2-INTERREG V-A):** Transboundary Cooperation for Development of Marine Spatial Planning (<https://www.mspscygr2.info/>)
- **ATHENA (Horizon 2020):** Remote Sensing Science Center for Cultural Heritage (<https://athena2020.eu/>)
- **CLIMA (JPI-CH):** Cultural Landscape risk Identification, Management and Assessment (<http://www.clima-project.eu/>)
- **PROTHEGO (JPI-CH):** PROtection of European Cultural HEritage from GeO-hazards (<http://www.prothego.eu/>)
- **THAL-CHOR (ΘΑΛ-ΧΩΡ-INTERREG IV):** Transboundary Cooperation for Development of Marine Spatial Planning (<http://www.mspscygr.info/>)
- **INTRAPRISE (ERASMUS+):** Infusing entrepreneurial skills in the corporate ICT environment (<http://www.intraprise-project.eu/>)
- **MEDNET (MED Programme):** Mediterranean Network for Custom Procedures and Simplification of Clearance in Ports (<http://www.mednetproject.eu/>)

Conferences and Seminars

- 2019: 7th International Conference on Remote Sensing and Geoinformation of Environment, Paphos, Cyprus.
- 2018: 6th International Conference on Remote Sensing and Geoinformation of Environment, Paphos, Cyprus.
- 2017: 5th International Conference on Remote Sensing and Geoinformation of Environment, Paphos, Cyprus.
- 2016: Seminar on the use of Copernicus Data: Sentinel 1 & Sentinel 2 using ERDAS IMAGINE 2016 (HEXAGON Geospatial), Athens, Greece. 2004: 1st Pan-Hellenic Conference of Surveyor Engineers, Athens, Greece.
- 2016: 4th International Conference on Remote Sensing and Geoinformation of Environment, Paphos, Cyprus.
- 2015: 3rd International Conference on Remote Sensing and Geoinformation of Environment,

Paphos, Cyprus.

- 2014: 2nd International Conference on Remote Sensing and Geoinformation of Environment, Paphos, Cyprus.
- 2013: ESA Radar Remote Sensing Course 2013, Nicosia, Cyprus.
- 2013: 1st International Conference on Remote Sensing and Geoinformation of Environment, Paphos, Cyprus.
- 2006: Introduction in Transport Assessments, Coventry, UK.

Honours and Awards

- Grant for postgraduate studies in Transport by the Evgenidis Institute of the N.T.U.A. as the student with the highest GPA in the department of Rural and Surveying Engineering to study for a postgraduate degree abroad.
- Many distinctions for undergraduate performance.

Memberships

- Member of the Technical Chamber of Greece (Surveying Engineer)
- Member of the Cyprus Scientific and Technical Chamber (ETEK)
- Certified Construction Site Visitor by CSCS (UK)