# **CURRICULUM VITAE**

# **CAREER ANNOTATION**

# DESCRIPTION OF SCIENTIFIC ACTIVITY

# ANDRONIKI TSOUCHLARAKI

December, 2021

#### **BRIEF NOTE OF PERSONAL INFORMATION**

#### • Personal data

FULL NAME Androniki Tsouchlaraki

WORKPLACE ADDRESS Technical University of Crete

School of Environmental Engineering

Kounoupidiana 73100 Chania Tel., 28210 37787 Fax., 28210 37887

CURRENT POSITIONS Member of the Faculty and Research

personnel, at the position of the Assistant Professor, (Official Government Gazette 701/21-7-2016/ is.3), Environmental

Hydraulics & Geoenvironmental Engineering

Division, School of Environmental

Engineering, Technical University of Crete.

#### • Synoptic Presentation of Academic Career.

Oct. 1986 – Apr. 1991 Pregraduate studies at the School of Rural and

Surveying Engineering (SRSE) at the National

Technical University of Athens (NTUA).

Sept. 1991 – Mar. 1997 Doctoral Research at the SRSE, NTUA, Department

of Geography and Regional Planning.

Nov. 1991 – Dec. 1991 Attended a seminar on "Integrated Land

Information Systems, Methods, Technical

Applications, Geographic Information Systems", organized by the Technical Chamber of Greece

(TCG).

Jul. 1992 – Aug. 1992 SUNY, College of Environmental Science and

Forestry, Syracuse N.Y., educational visit as PhD

candidate, on the subject of Environmental Simulation Models and Geographic Information Systems, funded by the project of the Geography and Regional Planning Department, SRSE, NTUA.

Jan. 1999 Attended a seminar on "Fundamental and Technical

analysis".

Oct. 1991 – 1997 Participated in the teaching of four courses of the

Undergraduate Studies Program at the SRSE, NTUA, one course of the Postgraduate Studies

| Program, at the Mediterranean Agronomical         |
|---------------------------------------------------|
| Institute of Chania, keynote speaker in eight     |
| educational seminars for postgraduate students of |
| various disciplines, both in Greek and English.   |

Sept. 1991 – Nov. 2006 Professional cooperation with research and technical

companies on various development, environmental,

and topographic projects.

Oct. 91 – 2002 Participated in 12 projects of the SRSE, NTUA.

Sept. 2000 – Febr. 2001 Teaching of "Geodesy" and "Geographic

Information Systems", School of Environmental Engineering, TUC (Presidential Degree. 407/1980).

Nov.2001 – Mar.2003 Postgraduate Research at the NTUA, SRSE.

Jan. 2002 – Jul. 2009 Consulting Professor on the Thematic Unit

"Introduction on the Natural and Man-made Environment", and on the Postgraduate project "Environmental Planning of Works of Infrastructure" at the Hellenic Open

University.

Oct.2003 – Sept.2001 Supervisor of Postgraduate theses at the NTUA, as

research assistant.

Oct.2002 – Jul.2004 Attended the Thematic Unit EKP65 – Open and

Distant Learning, at the HOU, Postgraduate

Learning for Consulting Professors.

Oct.2005 – Jul.2006 Scientific and Laboratory Coordinator at the

Surveying Department, School of Technological Applications, Technological Educational Institute of Athens, for the teaching of the subject "Error Theory

and Adjustment of Observations".

Sept.2006 – Apr.2011 Lecturer, (OGG 258/31-8-2006/is.3), Department of

Environmental Hydraulics and Geoenvironmental Engineering, TUC, on the field of "Computational Analysis of Spatial Information (Geodesy, GPS,

GIS).

Jul.1st, 2008 – Oct.31st, 2011 Scientific supervisor of a basic research

project of the TUC, on "Development of Indices for the recording of the environmental quality of urban streets, using GIS – GPS".

Sept 2006 – today supervisor of Undergraduate and Postgraduate

dissertations at the TUC, as Assistant Professor.

| Sept.13 – Febr.14 | Academic Sabbatical at the Harocopion University of Athens, Geography Department.                                                                                                                                                     |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| July 2016         | Tenure Assistant Professor, (OGG 701/21-7-2016, is. 3).                                                                                                                                                                               |
| Oct. 2018         | Organizational supervisor of the Workshop "Capabilities of the ArcGIS platform", 21/10/16, TUC.                                                                                                                                       |
| Jan 2017          | Scientific supervisor and Coordinator of the seminar "Surveillance Technologies and Environmental Protection – an interdisciplinary approach", co-organized by the TUC, TCG – Department of Western Crete, Law Association of Chania. |
| Sept 2020-today   | Sypervisor of N. Polakis PhD thesis.                                                                                                                                                                                                  |

## **Scholarships – Distinctions**

| 1987 | Scholarship (on award) for outstanding performance in the            |  |  |
|------|----------------------------------------------------------------------|--|--|
|      | undergraduate studies program, during the 1986 – 1987 academic year, |  |  |
|      | by the State Scholarship Foundation (SSF)                            |  |  |

- 1987 Scholarship (on award) for outstanding performance in the undergraduate studies program, during the 1987 1988 academic year, by the State Scholarship Foundation (SSF)
- Due to the completion of studies in 4.5 years less than the expected length of 5 years I was awarded the Diploma of Rural Surveying Engineer by Resolution of the NTUA Senate.
- Fourth best graduate in the SRSE out of 75 graduates.
- 1991 1994 Scholarship by the SSF, following written exams, for the undertaking of a Doctoral Dissertation on specialization 73085, "Urban and Regional Planning".
- 1994 1997 NTUA Scholarship, by approval of the General Assembly of the SRSE, for the continuation of the Doctoral Dissertation.
- 2001- 2002 SSF Scholarship for undertaking postgraduate research on Scientific Discipline 007 "Geography , Geology, Oceanography", Scientific subdiscipline 007 060 "Geodesy, Mapping, Photogrammetry and Telescopy".
- 2003 `Hellenic Diploma of Patent, OBI, 20030100417, N.Uzuloglou,C.Cassios, S.Mougiakakou, A.Tsouchlaraki, K.Nikita, G.Matsoploulos,

"Metric Arrangement of Landscape Category with Artificial Neural Networks."

#### **Educational Activities**

# Teaching and other educational activities in Higher Education Institutes and Technical Education Institutes.

**1990 – today** participated in the teaching of undergraduate courses in the School of Rural and Surveying Engineering.

Teaching of postgraduate course at the Mediterranean Agronomical Institute of Chania.

Teaching of undergraduate courses at the Geography Department of the Aegean University.

Teaching of undergraduate and postgraduate courses at the Department of Environmental Engineering, TUC.

Teaching of a Thematic unit of the postgraduate program, HOU.

Teaching of undergraduate course, Department of Surveying, School of Technological Applications, TEI of Athens.

Tutorial responsibilities include theoretical lectures and organizing – supervising of tasks, laboratories, written papers and semester assignments, in classes of 30 - 160 students, as well as the supervising of dissertations. In detail,

**2006 to today,** was assigned the teaching of the course "Environmental System Using Computer Aided Design", at the School of Environmental Engineering, TUC, as Assistant Professor.

**2006 to today,** was assigned the teaching of the postgraduate course "Advanced Application of Geographic Information Systems in Environmental Engineering", as Assistant Professor.

**2001 to 2009** Consulting Professor in the Thematic Unit "Introduction in the Natural and Man-made Environment", of the postgraduate program "Environmental Planning and Infrastructure Development", at the HOU, as Consulting Professor.

**2003 to 2011** Supervision of 39 postgraduate theses at the HOU, in the postgraduate program "Environmental Planning of Infrastructure Development".

**2008 to today** supervision of 32 diploma and postgraduate dissertations at the TUC, School of Environmental Engineering.

**2020 to today** supervision of N. Polakis doctoral thesis.

#### **Teaching in Educational Seminars**

Teaching in 8 educational seminars at postgraduate level, for various disciplines, held by a number of bodies, in cooperation with the Department of Geography and Regional Planning, SRSE, NTUA, on issues pertaining natural resources management, methods and techniques of assessing the environmental impact, landscape analysis and management, applications using GIS. The teaching included the theoretical presentation lecture as well as the assignment and supervision of tasks using computers.

#### **Research Activities**

#### Participation in NTUA projects.

1991- 2002 participated in 12 SRSE NTUA projects, including a full range of activities, from collecting, processing and analysis of data, to the organizing, coordinating and supervising of the scientific team.

#### Scientific supervisor of research projects at the TUC

July 2008 – October 2011 "Development of Indices for the recording of the Environmental Quality of city streets, using GIS – GPS", Basic Research project, 2008, TUC.

#### Organizational and Scientific Supervisor of Workshops.

"the Capacities of the Arc GIS platform", 21/10/16, TUC. In cooperation with representatives from the Data Marathon Systems company.

"Surveillance technologies and environmental protection, an interdisciplinary approach", 13/01/17, co organized by the TUC, TCG – Department of Western Crete, and the Law Association of Chania.

## Professional co operations.

cooperated with 12 bodies of the private and public sector, in my capacity as Rural and Surveying Engineer.

### Scientific projects

## A. Dissertations – Monographs

- **A.1** G.Achilleos, <u>A.Tsouchlaraki</u>, M.Savidou, Dissertation "Digitization and Documentation of the Fotodotis Christos Monastery in Danako, Naxos.", diploma dissertation, SRSE, NTUA, 1991, 54 pages
- **A.2** A.Tsouchlaraki on "Observation and planning of the Natural Environment Assessment Method of the Visual Value of Natural Relief", Doctoral

- thesis, SRSE, NTUA, Department of Geography and Regional Planning, 1997, 235 pages.
- A.3 A.Tsouchlaraki, "Investigating and planning of measurement indices for the assessment and classification of landscape quality using terrestrial digital images", Postgraduate Research at the SRSE, NTUA, 2003, 140 pages.

#### **B.** Books

- **B.1a** A.Tsouchlaraki, G.Achilleos, "Hands on learning of the GIS the ArcGIS 9.3", 2<sup>ND</sup> edition, 2015, Disigma Public., ISBN: 978-960-99048-4-1
- **B.1b** A.Tsouchlaraki, G.Achilleos, "Hands on learning of the GIS the ArcGIS 9.3", 2<sup>ND</sup> edition, 2015, Disigma Public., ISBN: 978-960-99048-4-1.
- **B.1c** A.Tsouchlaraki, G.Achilleos, N. Kourgialas "Hands on learning of the GIS the ArcGIS 10.5", 3<sup>ND</sup> edition, 2019, Disigma Public., ISBN: 978-618-5242-57-2.

#### C. Chapters in Books

- C.1 Androniki Tsouchlaraki, Andreas Nikolidakis and Georgios Achilleos, "Evaluating Environmental Quality of Urban Roads through a GIS", Natural Environment and Culture in the Mediterranean Region II, chapter twenty six, Editors: Recep Efe, Munir Ozturk and Ibrahim Atalay, Cambridge Scholars Publishing, 2011, ISBN (10): 1-4438-2986-2, ISBN (13): 978-1-4438-2986-1, pp. 339-356.
- C.2 Androniki Tsouchlaraki, Christina Gioti, Evaggelos Gidarakos, Georgios Achilleos, "A GIS analysis of landscape cetegories and sensitivity levels for evaluating visual impacts of N.I.M.B.Y Technical projects", Natural Environment and Culture in the Mediterranean Region II, chapter twenty eight, Editors: Recep Efe, Munir Ozturk and Ibrahim Atalay, Cambridge Scholars Publishing, 2011, ISBN (10): 1-4438-2986-2, ISBN (13): 978-1-4438-2986-1, pp. 375-394.
- C.3 <u>A. Tsouchlaraki</u>, G. Achilleos, V. Mantadaki, "Statistical Analysis of Environmental Quality Indices in an Urban Street Network", **Advances in Spatial Planning**, Edited by Dr. Jaroslav Burian, INTECH, 2012 ISBN 978-953-51-0377-6, 201, pp.197-220.

#### **D.**Publications in peer review journals

- D.1 G. Achilleos, <u>A. Tsouchlaraki</u>, M. Savidou, "Digitization and Documentation of the Fotodotis Christos Monastery in Danako, Naxos.", Technical Chronicles, A94, vol.14, issue 3, p. 287-305
- **D.2** <u>A.Tsouchlaraki</u>, "Digital Virtual Relief Representation in Landscape analysis", Technical Chronicles, TCG Public. I, issue 3, 1996, p. 27-37
- D.3 Mougiakakou S.G., <u>Tsouchlaraki A.</u>, Cassios C., Matsopoulos G., Nikita K.S., Uzunoglou N., "SCAPEVIEWER: Preliminary Results of a Landscape Perception Classification System based on Neural Network Technology", Ecological Engineering: The Journal of Ecotechnology, Vol. 24, Issues (1-2), 30 January 2005, pp.5-15, Elsevier Science Publishers BV.
- **D.4** Tsouchlaraki A., "A Quantitative Model for Evaluating Landforms Visual Value", International Journal of Environmental Studies, Vol.62, No. 3, June 2005, pp. 341-351, Routledge -Taylor & Francis Group.
- D.5 <u>Tsouchlaraki A.</u>, "A method for digital relief visualization based on terrestrial photogrammetry using GIS technology", International Journal of Sustainable Development and Planning, Vol. 1, No 1, 2006, pp. 110-121, WIT Press.
- Tsouchlaraki A., "An algorithm for digital relief visualisation capable for extracting measurment information and using GIS technology", Geocarto International: A Multi-disciplinary Journal of Remote Sensing and GIS, Vol. 21, No 1, March 2006, pp. 71-76, Geocarto International Centre.
- **D.7** <u>Tsouchlaraki A.</u>, "Fragmentation and complexity measures for the classification of landscape scenic beauty using digital ground photographs", International Journal of Ecodynamics, Vol. 1, No. 2 (2006), pp. 186-203, WIT Press.
- D.8 <u>Tsouchlaraki A.</u>, "Investigation of Indices for the Automated Quantification of Landscape Qualitative Characteristics using Digital Ground Photographs" International Journal of Sustainable Planning and Development, Vol. 1, No. 2 (2006), pp. 233-249, WIT Press.
- **D.9** <u>Tsouchlaraki A.</u>, "A landform classification method using GIS for perspective prediction and landscape visual analysis" International Journal of Ecodynamics, Vol. 1, No. 3 (2006), pp. 298-312, WIT Press.
- **D.10** <u>Tsouchlaraki A.</u>, "Exploring the effect of demographic elements on the evaluation of the scenic beauty of various landforms-Preliminary results" International Journal of Design & Nature, vol. 1, No. 3 (2007), pp. 247-257, WIT Press.
- **D.11** Androniki Tsouchlaraki, Eleftheria Zoaki, "Investigation of Environmental Quality of Roads in Heraklion, Crete", Wseas Transactions on Environment and Development, Issue 12, Volume 4, December 2008, pp. 1131-1151.

- **D.12** Theocharis Tsoutsos, <u>Androniki Tsouchlaraki</u>, Manolis Tsiropoulos, Michalis Serpetsidakis, 'Visual impact evaluation of a wind park in a Greek island", Applied Energy, Vol. 86, Issue 4, April 2009, pp. 546-553, Elsevier.
- **D.13** Tsoutsos T., <u>Tsouchlaraki A.</u>, Tsiropoulos M., Kaldelis J., 'Visual impact evaluation methods of wind parks: application for a Greek Island", Wind Engineering, 33 (1), January 2009, pp.83-92.
- **D.14** Androniki Tsouchlaraki, George Achilleos, Zoi Nasioula, Andreas Nikolidakis, "A System for Monitoring Environmental Quality of Urban Road Network and for Supporting Decision Makers", Wseas Transactions on Environment and Development, Issue 3, Volume 6, pp. 208-224, March 2010.
- **D.15** Zina Mitraka, Nektarios Chrysoulakis, Yiannis Kamarianakis, Panagiotis Partsinevelos, <u>Androniki Tsouchlaraki</u>, "Improving the estimation of urban surface emissivity based on sub-pixel classification of high resolution satellite imagery", Urban Environments Special Issue of Remote Sensing of Environment, Elsevier, vol.117, pp.125-134, 2012.
- D.16 A. Tsouchlaraki, G. Achilleos, "An extended Urban Street Network Classification Methodology: Defining the Environmental Quality Classes using Remotely Sensed Multispectral Data", Special Issue of Civil Engineering and Environmental Systems, Taylor & Francis, vol.29, issue 4, pp.239-254, 2012.
- **D.17** Vasileios Dimitrakis, <u>Tsouchlaraki Androniki</u>, "Seismic Activity Analysis Using GIS in the Western Part of Crete Island, Southern Greece" Frontiers in Geosciences, American V-King Scientific Publishing, issue 3, vol.2, pp.41-52, 2014.
- D.18 Vasileios Dimitrakis, <u>Tsouchlaraki Androniki</u>, "Using GIS in Highlighting Seismic Safe Sites for Large Scale Buildings in the Western Part of Crete Island, Southern Greece", Frontiers in Geosciences, American V-King Scientific Publishing, volume 3, number 1, pp.1-10, 2015.
- D.19 Giatrakis Georgios, Kourgialas N. Nektarios, <u>Tsouchlaraki Androniki</u>, Maria Efpraxia, Dokou Zoi, "Could Photovoltaic Parks be More Profitable as an Investment Compared to Tree Crops in Mediterranean Water Scarce Regions?", Scientific Review, Vol. 5, Issue. 7, pp:124-131, 2019, <a href="https://arpweb.com/journal/10/archive/07-2019/7/5">https://arpweb.com/journal/10/archive/07-2019/7/5</a>.