# EUROPEAN CURRICULUM VITAE FORMAT



PERSONAL INFORMATION

Name

**Work Address** 

Telephone E-mail URL Nationality

> Date of birth Gender Family status



MARRIED (THREE CHILDREN)

PROF. DR. CONSTANTINOS (COSTAS) ANTONIOU
Technical University of Munich
Chair of Transportation Systems Engineering
Department of Civil, Geo and Environmental Engineering
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+49 89 28910460
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www.tse.bgu.tum.de
Hellenic (European Union)
4 MARCH 1973
MALE

Constantinos Antoniou is a Full Professor in the Chair of Transportation Systems Engineering at the Technical University of Munich (TUM), Germany. He holds a Diploma in Civil Engineering from NTUA (1995), a MS in Transportation (1997) and a PhD in Transportation Systems (2004), both from MIT. His research focuses on modelling and optimization of transportation systems, data analytics and machine learning for transportation systems, and human factors for future mobility systems and in his 25 years of experience he has held key positions in a number of research projects in Europe, the US and Asia, while he has also participated in a number of consulting projects. Costas has a proven track record in attracting competitive funding in both national and international levels. He is/has been PI of several research projects (e.g. H2020 iDREAMS, MOMENTUM, Drive2thefuture, DFG DVanPool and Trampa), and has contributed considerably to the preparation of a large number of funded proposals, in the national and international level.

He has authored more than 400 scientific publications, including more than 110 papers in international, peer-reviewed journals, 250 in international conference proceedings, 3 books and 20 book chapters. He is a member of several professional and scientific organizations, editorial boards (Member of the Editorial Board of Transportation Research – Part A: Policy and Practice, Transportation Research – Part C, Accident Analysis and Prevention, Accident Analysis and Prevention, Journal of Intelligent Transportation Systems, Smart Cities; Deputy Editor in Chief of IET Intelligent Transportation Systems; Associate Editor of Transportation Letters; Editor of EURO Journal on Transportation and Logistics), committees (such as TRB committees AHB45 – Traffic Flow Theory and Characteristics and ABJ70 - Artificial Intelligence and Advanced Computing Applications, Steering Committee of hEART – The European Association for Research in Transportation, and FGSV Committee 3.10 "Theoretical fundamentals of road traffic"), and a frequent reviewer for a large number of scientific journals, scientific conferences, research proposals and scholarships.

He enjoys teaching at the graduate and undergraduate levels, as well as in other venues, such as Summer Schools and Short Courses. He has supervised two PhD students (at NTUA, graduated at 2014 and 2018), and is currently supervising eight more, has supervised 5 graduate theses and 17 five-year diploma theses at NTUA, more than fifteen MS theses at TUM, as well as participated in various roles in doctoral committees and examinations in other universities (such as TU Delft, KTH, TU Berlin, University of Naples – Federico II, EPFL, the National University of Singapore, the University of Luxembourg, the University of the Aegean, Politecnico di Torino, Universitat Politecnica de Catalunya).

#### **RESEARCH INTERESTS**

- MODELING AND SIMULATION OF TRANSPORTATION SYSTEMS, WITH AN EMPHASIS ON BEHAVIORAL ASPECTS AND DEMAND MODELING
- BIG DATA AND DATA ANALYTICS, DATA DRIVEN MODELS
- INTELLIGENT TRANSPORT SYSTEMS (ITS), INCLUDING USER ACCEPTANCE AND PERCEPTION
- CALIBRATION AND OPTIMIZATION APPLICATIONS, WITH AN EMPHASIS ON DERIVATIVE-FREE, LARGE SCALE ALGORITHMS FOR STOCHASTIC, NOISY SYSTEMS
- Road safety and Human Factors
- STATISTICS AND ECONOMETRICS MODELS AND THEIR APPLICATIONS

# WORK EXPERIENCE

(SELECTED PROJECTS' LIST IN ANNEX 1)

- Dates (from to)
- Name and address of employer
- Type of business or sector
- · Occupation or position held
- Main activities and responsibilities
- Dates (from to)
- Name and address of employer
- Type of business or sector
- Occupation or position held
- Main activities and responsibilities
- Dates (from to)
- Name and address of employer
- Type of business or sector
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- · Occupation or position held

Page 2 - Curriculum vitae of ANTONIOU, Constantinos

1/9/2016-Present

Technical University of Munich, Germany

University / Higher Education

Full Professor, Chair of Transportation Systems Engineering

Teaching graduate courses, supervision of theses and Ph.D. dissertations, preparation, management and execution of research projects (e.g. H2020 NOESIS, MOMENTUM, i-DREAMS and DriveToTheFuture; DFG D-Vanpool and TRAMPA; Marie Curie HumAV, SPARTAN, and INTERMODE; IGSEE MO3; COST Action CA16222 Wise-ACT), basic and applied research.

1/4/2016-30/6/2016

Eidgenössische Technische Hochschule Zürich (ETH), Switzerland

University / Higher Education

Visiting Professor

Research collaborations, seminar, preparation of scientific publications

1/2/2016-31/3/2016

École Polytechnique Fédérale De Lausanne (EPFL), Switzerland

University / Higher Education

Visiting Professor

Research collaborations, seminar and participation in teaching of undergraduate course Global Issues (Track: Mobility)

4/9/2009-30/9/2015

National Technical University of Athens, Greece

University / Higher Education

Tenured Associate Professor (since 21.8.2014, Assistant Professor until then)

Teaching graduate and undergraduate courses, supervision of diploma theses and Ph.D. dissertations, preparation, management and execution of research projects (e.g. EU co-funded projects DACOTA, SustainCity, Multitude - COST Action TU0903, as well as nationally funded projects, such as DriverBrain, DISTRACT and EMPARCO), basic and applied research.

1/7/2008-Present

Massachusetts Institute of Technology, Cambridge MA, USA

University / Higher Education

Research Affiliate

Co-supervision of graduate theses, participation in research projects, both in Cambridge (US) and the Singapore-MIT Alliance for Research and Technology (SMART) in Singapore

1/10/2004-30/6/2008

Massachusetts Institute of Technology, Cambridge MA, USA

University / Higher Education

Post-doctoral Research Associate

- · Main activities and responsibilities
- Dates (from to)
- Name and address of employer
- Type of business or sector
- · Occupation or position held
- Main activities and responsibilities
- Dates (from to)
- Name and address of employer
- Type of business or sector
- · Occupation or position held
- Main activities and responsibilities
- Dates (from to)
- Name and address of employer
- Type of business or sector
- Occupation or position held
- · Main activities and responsibilities
- Dates (from to)
- Name and address of employer
- Type of business or sector
- Occupation or position held
- Main activities and responsibilities
- Dates (from to)
- Name and address of employer
- · Type of business or sector
- Occupation or position held
- · Main activities and responsibilities
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- Type of business or sector
- · Occupation or position held
- · Main activities and responsibilities
- Dates (from to)
- Name and address of employer
- Type of business or sector
- Occupation or position held
- · Main activities and responsibilities

# **EDUCATION AND TRAINING**

- Dates (from to)
- University
- Principal subjects/occupational

Page 3 - Curriculum vitae of ANTONIOU, Constantinos

Management and participation, including Technical Lead, in research projects, co-supervision of graduate theses, preparation of research proposals

1/6/2006-30/6/2008

TREDIT S.A., Athens, Greece

Transport Consultancy

Director of Athens Branch

Athens branch administration, Principal Investigator (PI) of EU projects (including

FREIGHTWISE, EFFORTS, EURIDICE, PROMIT, MADAMA, MEDIGATE, CORELOG, SMART-

CM) and national projects, preparation of research proposals

1/4/2000- 14/3/2008

National Technical University of Athens, Greece

University / Higher Education

Research Associate

Participation in EU projects primarily related to road safety and ITS (incl. ADVISORS, SAFETY-NET, MARIE CURIE FLEXIBLETRAFFIC) and national projects

1/9/2001-30/9/2004

Massachusetts Institute of Technology, Cambridge MA, USA

University / Higher Education

Full-time Research Assistant

Management and participation in research projects, co-supervision of undergraduate projects and graduate theses, preparation of research proposals

1/6/2000-30/5/2001

TRD International SA, Athens, Greece

Transport Consultancy

Senior Transportation Consultant

Participation in research projects, development of software (including some the main components of the Container Management Terminal System currently operational at the Port of Thessaloniki (second largest port in Greece).

1/5/1999- 28/2/2000

IBI Group UK Ltd., Athens, Greece

Transport Consultancy/System integrator

Senior Transportation Engineer

Participation in the design of the Integrated Toll and Traffic Management System of the Attiki Odos Toll-way

1/3/1997-30/8/1997

DENCO Ltd. Athens, Greece

Transport Consultant

Transportation Engineer

Traffic simulation study for the prediction of the expected traffic under various tolling schemes for the (then-planned) underwater tunnel for the Malliakos Gulf.

1/9/1995- 30/2/1997

Massachusetts Institute of Technology, Cambridge MA, USA

University / Higher Education

Full-time Research Assistant

Management and participation in research projects, preparation of research proposals

1/9/2001-30/9/2004

Massachusetts Institute of Technology, Cambridge MA, USA

Transportation Systems Simulation and Operation, Intelligent Transport Systems, Modeling and

skills covered

· Title of qualification awarded

• Dates (from - to)

- University
- Principal subjects/occupational skills covered
- · Title of qualification awarded

• Dates (from - to)

- University
- Principal subjects/occupational skills covered
- Title of qualification awarded

**PUBLICATIONS** 

(LIST IN ANNEX 2)

**CITATIONS** 

EDITORIAL BOARD AND SCIENTIFIC COMMITTEE MEMBERSHIP

Optimization, Demand Modeling, Public Transport Operation and Management

Ph.D. in Transportation Systems, title: "On-line calibration for dynamic traffic assignment", supervisors: Prof. M. Ben-Akiva and Prof. H. N. Koutsopoulos

1/9/1995-30/2/1997

Massachusetts Institute of Technology, Cambridge MA, USA

Transportation Systems Simulation and Operation, Intelligent Transport Systems, Modeling and Optimization, Demand Modeling

MS in Transportation, title: "Demand simulation for dynamic traffic assignment", supervisor: Prof. M. Ben-Akiva

1/9/1990-30/6/1995

National Technical University of Athens, Greece

Civil Engineering

Transportation Engineering

Diploma (5-year) in Civil Engineering (Transportation Specialization)

More than 400 scientific publications, including 2 diploma theses, 1 doctoral dissertation, 3 books, more than 25 chapters in books, more than 115 publications in peer-reviewed scientific journals, more than 250 publications in refereed international conference proceedings, 100 presentations in conferences and workshops without proceedings and 3 Lecture notes/textbooks

These publications have attracted hundreds of citations from other researchers. As of June 12, 2020, there were >4450 citations in Google Scholar (>3200 in the last five years), (h-index: 36, i10-index: 83, i100-index: 6)

EDITORIAL BOARD OF TRANSPORTATION RESEARCH PART A: POLICY AND PRACTICE EDITORIAL BOARD OF TRANSPORTATION RESEARCH PART C: EMERGING TECHNOLOGIES

EDITORIAL BOARD OF JOURNAL OF INTELLIGENT TRANSPORTATION SYSTEMS

DEPUTY EDITOR-IN-CHIEF OF IET INTELLIGENT TRANSPORTATION SYSTEMS

ASSOCIATE EDITOR OF TRANSPORTATION LETTERS

ASSOCIATE EDITOR OF EURO JOURNAL OF TRANSPORT AND LOGISTICS

GUEST EDITOR IN SPECIAL ISSUES FOR SEVERAL JOURNALS (E.G. IEEE TRANSACTIONS IN ITS, TRANSPORTATION RESEARCH PART C, ACCIDENT ANALYSIS AND PREVENTION)

MEMBER OF TRB COMMITTEE AHB45 - TRAFFIC FLOW THEORY AND CHARACTERISTICS

MEMBER OF TRB COMMITTEE ABJ70 - ARTIFICIAL INTELLIGENCE AND ADVANCED COMPUTING APPLICATIONS

SECRETARY OF TRB COMMITTEE AND 20 - USER INFORMATION SYSTEMS (UNTIL APRIL 2017)

MEMBER OF THE TRB TASK FORCE ON SIMULATION (UNTIL 2019)

MEMBER OF THE TRB TASK FORCE ON DATA PRIVACY, SECURITY AND PROTECTION POLICY MEMBER OF THE FGSV COMMITTEE 3.10 ON "THEORETICAL FOUNDATIONS OF ROAD TRAFFIC" STEERING COMMITTEE MEMBER OF HEART: EUROPEAN ASSOCIATION FOR RESEARCH IN TRANSPORTATION

MEMBER OF >80 SCIENTIFIC COMMITTEES OF INTERNATIONAL AND NATIONAL SCIENTIFIC CONFERENCES (INCLUDING PUBLICATIONS CHAIR IEEE ITSC 2016 AND IEEE MT-ITS 2017, SPECIAL SESSIONS CO-CHAIR IEEE ITSC 2010, Co-ORGANISER MOBIL.TUM2018, ORGANIZER HEART2018, ORGANIZER MOBIL.TUM 2019, SPECIAL SESSIONS CHAIR IEEE ITSC 2020, ORGANIZER IEEE MT-ITS 2021)

REVIEWING RESPONSIBILITIES

(SEE ANNEX 3 FOR SELECTIVE LIST)

REVIEWER FOR OVER 50 SCIENTIFIC JOURNALS, MORE THAN 100 INTERNATIONAL AND NATIONAL SCIENTIFIC CONFERENCES, AS WELL AS RESEARCH PROPOSALS IN MORE THAN 15 RESEARCH ORGANIZATIONS FROM EUROPE, THE US AND OTHER REGIONS.

**PARTICIPATION IN CONFERENCES** 

PARTICIPATION IN >150 CONFERENCES

CHAIR OR MODERATOR OF SESSIONS IN >80 SCIENTIFIC CONFERENCES

TEACHING

DEVELOPMENT AND TEACHING OF 8 GRADUATE COURSES AT TUM (SINCE 2016).

- APPLIED STATISTICS IN TRANSPORT (COMPULSORY FOR THE MS IN TRANSPORTATION SYSTEMS)
- ADVANCED ROAD SAFETY CONCEPTS
- Multimodal and Intermodal Freight Transport
- OPTIMIZATION FOR TRANSPORTATION SYSTEMS
- DISCRETE CHOICE ANALYSIS FOR TRANSPORTATION SYSTEMS
- TRANSPORTATION ECONOMICS
- STATISTICAL LEARNING AND DATA ANALYTICS FOR TRANSPORTATION SYSTEMS
- Special Topics on Transportation Model Calibration

DEVELOPMENT AND TEACHING OF 3 GRADUATE COURSES AT TUM ASIA (SINCE 2017).

- Decision Support Systems for Logistics Management
- TRANSPORTATION MODELING AND SIMULATION TOOLS
- DISCRETE CHOICE ANALYSIS FOR TRANSPORTATION SYSTEMS.

TEACHING OF 7 COURSES AT NTUA (BETWEEN 2008 AND 2015):

UNDERGRADUATE (WITHIN 5-YEAR DIPLOMA PROGRAMME):

- Design of Transportation Facilities other than Highways and Principles of Transportation Economics, 5th semester. Compulsory course
- HIGHWAY ENGINEERING II (TRAFFIC ENGINEERING), 7TH SEMESTER. COMPULSORY FOR TRANSPORTATION DIRECTION
- TRANSPORTATION SYSTEMS, 7TH SEMESTER. COMPULSORY FOR TRANSPORTATION DIRECTION
- HIGHWAY ENGINEERING III (INTERSECTION DESIGN AND OPERATION), 8TH SEMESTER.
   COMPULSORY FOR TRANSPORTATION DIRECTION
- Rail way Engineering, 8th semester. Elective course
- HIGHWAY DESIGN AND OPERATION, 9TH SEMESTER. PROJECT-ORIENTED COURSE

#### GRADUATE (MSc IN GEOINFORMATICS):

■ TELEMATICS APPLICATIONS IN TRANSPORTATION INFRASTRUCTURE, 2ND SEMESTER. ELECTIVE COURSE

ORGANIZATION AND PARTICIPATION IN A NUMBER OF SUMMER SCHOOLS AND RELATED ACTIVITIES, SUCH AS THE MULTITUDE SUMMER SCHOOLS IN ISPRA, ITALY (2012), CHIOS, GREECE (2014), NICOSIA, CYPRUS (2015), NAPOLI, ITALY (2017), BIG DATA AND MOBILITY SUMMER SCHOOL IN NICOSIA, CYPRUS (2016), HEART SUMMER SCHOOL, ATHENS, GREECE (2018), WISE-ACT TRAINING SCHOOL, HAIFA, ISRAEL (2019).

# SUPERVISION OF DISSERTATIONS AND THESES

SUPERVISION OF (11 ONGOING AND 1 COMPLETED) DOCTORAL DISSERTATIONS AT TUM AND (2 COMPLETED) DOCTORAL DISSERTATIONS AT NTUA

OPPONENT/EXAMINER/COMMITTEE MEMBER IN (>15 COMPLETED) DOCTORAL DISSERTATIONS MEMBER OF ADVISORY/MONITORING AND EVALUATION COMMITTEES FOR SEVERAL PHD STUDENTS SUPERVISION OF >15 MS THESES AT TUM MS IN TRANSPORTATION SYSTEMS AND MS IN CIVIL ENGINEERING

SUPERVISION OF MS THESES AT TUM MS IN RAIL TRANSPORT AND LOGISTICS SUPERVISION OF (5) MS THESES AT NTUA MSc PROGRAMME IN GEOINFORMATICS (UNTIL 2015) SUPERVISION OF (17) DIPLOMA THESES AT NTUA (UNTIL 2015)

PARTICIPATION IN SUPERVISION OF MS THESES AT VARIOUS UNIVERSITIES (SUCH AS MIT)

# INVITED KEYNOTES AND SEMINARS

Invited to give **Keynote presentations** at conferences (e.g. International Symposium on the Recent Advances in Intelligent Transportation Systems and Traffic Flow Theory: The frontier and Challenges in Hangzhou China in Oct 2014, Reliability and Statistics 2012 in Riga, Latvia and 15<sup>™</sup> Road Safety Seminar In 2013 in Cyprus, Cognition, Behavior and Driving, Athens, 2016, Revolutionary Innovation in 2016 in Brussels, EWGT2018 in Braunschweig, Reliability and Statistics 2019 in Riga, Latvia) and number of **seminars** (e.g. University of Cyprus, Portland State University, UC Berkeley, EPFL, TU Berlin, University of Naples, CalPoly at San Luis Obispo, ETHZ, TU Delft, KTH Royal Institute of Stockholm)

# **AWARDS AND DISTINCTIONS** (SELECTED)

BEST PAPER AWARD FROM THE SIMULATION JOINT SUBCOMMITTEE OF THE TRANSPORTATION RESEARCH BOARD OF THE US NATIONAL ACADEMIES OF SCIENCE, JANUARY 2018

CERTIFICATE OF APPRECIATION FROM THE TRANSPORTATION RESEARCH BOARD OF THE US NATIONAL ACADEMIES OF SCIENCE "IN RECOGNITION FOR THE SERVICE AS COMMITTEE SECRETARY". JANUARY 2017

RECOGNITION FOR LIFE-TIME CONTRIBUTION TO THE HELLENIC INSTITUTE OF TRANSPORTATION Engineers, December 2017

MEMBER OF THE STEERING COMMITTEE OF HEART - EUROPEAN ASSOCIATION FOR RESEARCH IN TRANSPORTATION (HEART-WEB.ORG) (2014-PRESENT)

GRANT FOR SHORT-TERM SCIENTIFIC MISSION (STSM) FROM COST, JUNE-JULY 2013

OIKOPOLIS AWARD 2013 FOR BEST DIPLOMA THESIS IN THE FIELD OF TRANSPORT (SUPERVISOR OF MARKOS KLADEFTIRAS' THESIS)

2013 TRB COMMITTEE ANB20 2013 "OUTSTANDING PAPER AWARD" FOR THE PAPER "ANTONIOU, C., AND G. YANNIS, ASSESSMENT OF EXPOSURE PROXIES FOR MACROSCOPIC ROAD SAFETY PREDICTION"

CONFERENCE GRANT FOR EARLY STAGE RESEARCHERS (AWARDED BY THE EU COST OFFICE) (FOR PARTICIPATION TO THE 91ST ANNUAL MEETING OF THE TRANSPORTATION RESEARCH BOARD, JANUARY 2012, WASHINGTON, D.C.).

2011 IEEE ITS OUTSTANDING APPLICATION AWARD (FOR DYNAMIT DTA MODEL)

MARIE-CURIE FELLOW (2006-2008 INTERNATIONAL REINTEGRATION GRANT, AWARDED BY THE EU)

"ALL-ROUND EXCELLENCE" GRANT (2005-2006) - EXCELLENCE GRANT FROM THE AUSTRIAN RESEARCH CENTERS (ARC)

FHWA SCHOLARSHIP - TRAVEL GRANT, FOR PARTICIPATION TO THE 7TH INTERNATIONAL IEEE CONFERENCE ON INTELLIGENT TRANSPORTATION SYSTEMS, WASHINGTON, D.C., OCTOBER 3-6, 2004.

FULL-TIME RESEARCH ASSISTANT, DEPT. OF CIVIL AND ENVIRONMENTAL ENGINEERING, MIT (1995-1997, 2001-2004)

1997 MILTON PIKARSKY AWARD "FOR AN OUTSTANDING MASTER OF SCIENCE THESIS", AWARDED BY THE COUNCIL OF UNIVERSITY TRANSPORTATION CENTERS (CUTC)

#### **PROFESSIONAL MEMBERSHIPS**

AMERICAN SOCIETY OF CIVIL ENGINEERS (UNTIL 2012)

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) (UNTIL 2013)

TRANSPORTATION RESEARCH BOARD (TRB)

TECHNICAL CHAMBER OF GREECE (TEE)

ASSOCIATION OF CIVIL ENGINEERS OF GREECE (SPME)

HELLENIC INSTITUTE OF TRANSPORTATION ENGINEERS (HITE) – CHAIRMAN OF THE BOD (2014-2016), VICE-CHAIRMAN OF THE BOD (2012-2014), GENERAL SECRETARY OF THE BOD (2010-2012), SPECIAL SECRETARY OF THE BOARD OF DIRECTORS (BoD) (2008-2010).

PERSONAL SKILLS AND COMPETENCES

# MOTHER TONGUE

#### **GREEK**

# OTHER LANGUAGES

# · Reading skills

- Writing skills Verbal skills
- · Reading skills
- · Writing skills
- Verbal skills

# **ENGLISH**

**EXCELLENT** 

EXCELLENT

EXCELLENT

# **GERMAN**

**VERY GOOD** 

VFRY GOOD

VFRY GOOD

**ORGANISATIONAL SKILLS** 

EFFECTIVE MANAGEMENT OF SMALL- AND MID-SIZE TEAMS (RESEARCH TEAMS AT TUM, MIT AND NTUA,

AND COMPETENCES

OFFICE OF 15 PEOPLE AND RESEARCH GROUP OF 10+ AT TREDIT)

PREPARATION OF PROPOSALS, INCLUDING TECHNICAL AND FINANCIAL ASPECTS – SUCCESSFUL IN RAISING GRANTS BASED ON THESE PROPOSALS IN A NATIONAL (GREEK/US/GERMANY) AND INTERNATIONAL (EU) LEVEL

ENTHUSIASTIC IN TEACHING, ATTRACTING POSITIVE FEEDBACK AND EVALUATIONS FROM STUDENTS PRESENTATIONS AND COMMUNICATION SKIILS, BOTH AT PROFESSIONAL AND SCIENTIFIC VENUES

TECHNICAL SKILLS
AND COMPETENCES

SIGNIFICANT EXPERIENCE IN THE DESIGN AND DEVELOPMENT OF TECHNICAL AND SCIENTIFIC SOFTWARE IN SEVERAL LANGUAGES (INCLUDING: C/C++, PYTHON, MATLAB/OCTAVE, BASH/TCSH SHELL SCRIPTING, DELPHI/PASCAL, SQL, MAPOBJECTS, CORBA) AND PLATFORMS (INCLUDING: WINDOWS, LINUX, MAC OS X, SOLARIS, IRIX).

VERY GOOD USE OF TRANSPORTATION SOFTWARE (E.G. DYNAMIT, MITSIMLAB, TRANSMODELER, AIMSUN, SATURN, VISSIM), STATISTICAL SOFTWARE (E.G. R, SPSS, STATA, BIOGEME, SST) AND GEOGRAPHIC INFORMATION SYSTEMS (E.G. TRANSCAD, QGIS, ARCVIEW)

OTHER MEMBERSHIPS/INTERESTS

MIT CLUB OF GREECE – PRESIDENT OF THE BOD (2015-2017), VICE-PRESIDENT OF THE BOD (2011-2015), SECRETARY OF THE BOD (2005-2011), MEMBER OF THE BOARD OF DIRECTORS (BOD) (1999-2001).

MIT ENTERPRISE FORUM GREECE – CO-FOUNDER AND MEMBER OF THE BOARD OF DIRECTORS (BOD) (2013-PRESENT: SECRETARY OF THE BOARD OF DIRECTORS UNTIL 2020)

ATHENS COLLEGE ALUMNI CLUB (SAKA)

MIT ALUMNI ASSOCIATION HELLENIC RED CROSS, MEMBER

**ANNEXES** 

- 1. LIST OF SELECTED PROJECTS
- 2. LIST OF SELECTED PUBLICATIONS
- 3. Reviewing Responsibilities

# **ANNEX 1. List of selected projects**

ANNEX 1. List of selected projects			
Technical University of Munich (TUM)			
2020	PI of "Share-More - SHAREd MObility REwards mission", funded by EIT Urban Mobility (total budget:		
0040 0000	350K€,TUM budget: 40K€).		
2019-2022	PI (with Prof. R Moeckel, TUM) Transportation Modeling Using Publicly Available Data: An Evolution for Model		
0040 0000	Input Data (TraMPa), funded by DFG (TUM TSE budget: 330K€)		
2019-2022	PI of "i-DREAMS - Safety tolerance zone calculation and interventions for driver-vehicle-environment interactions under challenging conditions", funded within the EU H2020 framework (total budget: 6.3M€, TUM		
	budget: 595K€)		
2019-2022	PI of "MOMENTUM - Modelling Emerging Transport Solutions for Urban Mobility", funded within the EU H2020		
2010 2022	framework (total budget: 2.9M€, TUM budget: 318K€)		
2019-2022	PI of "DriveToTheFuture - Needs, wants and behaviour of 'Drivers' and automated vehicle users today and into		
	the future", funded within the EU H2020 framework (total budget: 4.0M€, TUM budget: 98K€)		
2019	Co-PI of "Erforschung des langfristigen Anwendungspotenzials von Urban Air Mobility als Erganzung zum		
	offentlichen Personennahverkehr am Beispiel Oberbayern" (OBUAM), funded from the Bavarian Ministry of		
	Economic Affairs, Regional Development and Energy (TUM TSE budget: 57K€)		
2018-2021	PI (with Prof. H. Jiang, Tsinghua U.) Dynamic vanpool services: Passenger preferences, operations modeling,		
	and simulation- based quantification of impacts (D-Vanpool), funded by DFG and the Chinese National Science		
2018-2022	Foundation (TUM budget: 330K€) PI (with Prof. J. Ött, TUM) MOnitoring, MOdeling and forecasting MObility patterns (MO3), funded by TUM		
2010-2022	International Graduate School of Science and Engineering (IGSSE) (3 person-years)		
	PI and Scientific Technical Manager of "NOESIS - NOvel Decision Support tool for Evaluating Strategic Big		
2017-2019	Data investments in Transport and Intelligent Mobility Services", funded within the EU H2020 framework (total		
	budget: 1.2M€, TUM budget: 187K€)		
2017-2021	National representative and Management Committee member in the COST Action - CA 16222 Wider Impacts		
	and Scenario Evaluation of Autonomous and Connected Transport (WISE-ACT)		
2017-2018 and			
2019	15.000€)		
National Technic	al University of Athens (NTUA)		
1998	Participation in the technical team for the preparation of the Plan of Peripheral Development of the Ministry of		
1000	Transport for the European Support Framework 2000-2008.		
2000-2002	Participation in the research project «ADVISORS – Action for advanced Driver assistance and Vehicle control		
	systems Implementation, Standardisation, Optimum use of the Road network and Safety» of the 5th Framework		
	Programme for Research in Transport of the EU.		
2004-2009	Participation in the research project «SAFETYNET – European Road Safety Observatory» of the 6th		
	Framework Programme for Research in Transport of the EU.		
2006-2008	Basic researcher and fellow of the research project «FLEXIBLETRAFFIC – Development of flexible traffic		
	models that exploit emerging data collection technologies with the use of machine learning concepts «, co-		
2009	funded through the Marie-Curie programme of the EU.  Main researcher in the research project «Reliability of traffic forecasts regarding the construction of new		
2009	motorways in Greece».		
2009	Main researcher in the research project: «Road safety improvements in the vicinity of school compounds in		
2003	Athens» (sponsor: Municipality of Athens)		
2010-2012	Participation in the research project «DACOTA – Road Safety Data, Collection, Transfer and Analysis» of the		
	7th Framework Programme for Research of the EU.		
2009-2013	National representative and Management Committee member in the COST Action - TU 0903 Methods and		
	Tools for Supporting the Use, Calibration and Validation of Traffic Simulation Models (WG3 and WG4 co-leader)		
2010-2013	Principal Investigator (NTUA) for the research project «SustainCity - Micro-simulation for the prospective of		
	sustainable cities in Europe» of the 7th Framework Programme for Research of the EU.		
2010-2012	Principal Investigator for the research project «Investigation of dynamic on-line calibration algorithms"		
	performance characteristics for large scale systems» sponsored by the NTUA Basic Research Programme.		
2011-2013	Main researcher (NTUA) in the project: «Highway Design and Management: Curricular Reform for Russian		
	Federation - Design and Implementation of Higher Education Master Courses in Russia», funded by the EU		
	TEMPUS IV Programme.		
2012-2015	Researcher in the project «DriverBRAIN – Performance of drivers with cerebral diseases at unexpected		
0040 0045	incidents", funded by the Greek National Excellence (ARISTEIA) Programme.		
2012-2015	Researcher in the project "DISTRACT – Causes and impacts of driver distraction: a driving simulator study",		
2014-2016	funded by the Greek Thales Research Programme.  Main researcher (NTUA) in the project: «Highway and Traffic Engineering: Curricular Reform for Mediterranean		
20 17 20 10	Area – HIT4MED», funded by the EU TEMPUS IV Programme.		
5 0 0 1 :	" (		

2014-2015	Principal Investigator in the project: «EMPARCO - Effective Management of PARking under COnstraints»,
	funded by the Greek National Excellence-II (ARISTEIA-II) Programme.
2014-2017	National representative and Management Committee member in the COST Action – TU1305 Social Networks and Travel Behavior
2014-2015	Grant for the preparation of Traffic Flow Theory textbook (as ebook), to be used in several Greek universities for teaching related courses (within the Kallipos framework)

# Massachusetts Institute of Technology, Department of Civil and Environmental Engineering, Intelligent Transportation Systems Programme

1995 –1997 and 2001–2002	Participation in the research project: "A Deployable Real-Time Dynamic Traffic Assignment System" (Sponsor: Federal Highway Administration, FHWA)
2001-2003	Technical coordinator in the research project: "DynaMIT – ITS Study: Development of ITS Analysis Tools for Lower Westchester County – Phase I" (Sponsor: New York State Department of Transportation, NYSDOT)
2002-2004	Participation in the research project: "NGSIM – Next Generation Simulation Models" (Sponsor: Federal Highway Administration, FHWA)
2003-2005	Basic researcher in the research project: "NSF/USDOT Collaborative Proposal: Methodology for Calibration and Validation of Traffic Simulation Models" (Sponsor: National Science Foundation, NSF)
2003 –2005	Basic researcher in the research project: "Evaluation of the DynaMIT system in Los Angeles" (Sponsor: US Department of Transportation)
2003 –2005	Basic researcher in the research project: "Evaluation of the DynaMIT system in Hampton Roads, VA" (Sponsor: Federal Highway Administration, FHWA)
2003-2008	Main researcher in the research project: "DynaMIT – ITS Study: Development of ITS Analysis Tools for Lower Westchester County – Phase II" (Sponsor: New York State Department of Transportation, NYSDOT)
2011-	Participation in the Future Urban Mobility cluster of projects in the SMART (Singapore-MIT Alliance for Research and Technology) initiative

# Arsenal research, Transport telematics group, Vienna, Austria

2005-2006 Participation in the research project "INTRO – Intelligent Roads" of the 6th Framework Programme for Research in Transport of the EU.

# Hellenic Institute of Transport (HIT), Centre for Research and Technology Hellas (CERTH)

2006 Participation in the research project «PROMIT: Promoting Innovative Intermodal Freight Transport» of the 6th Framework Programme for Research in Transport of the EU.

# Aristotle University of Thessaloniki

2006-2008	Main researcher in the research project «CORELOG- Coordinated Regional Logistics» within the EU programme INTERREG IIIB CADSES.
2007-2008	Main researcher in the research project «MEDIGATE - Interconnections dans l'espace Medocc pour promouvoir le transport intermodal et l'intégration à travers les noeuds intermodaux» то within the EU programme INTERREG IIIB MEDOCC.

<u>KE</u>	<u>ווט</u>	<u>S.</u>	<u>A.</u>

1999-2000	Participation in the research project "INTACT – Integrated Telematics for Advanced Communication in Transport" of the 4th Framework Programme for Research of the EU.
2006-2008	Scientific responsible for the research project «FREIGHTWISE – Management Framework for Intelligent Intermodal Transport» of the 6th Framework Programme for Research of the EU.
2006-2008	Scientific responsible for the research project «EFFORTS – Effective Operations in Ports» of the 6th Framework Programme for Research of the EU.
2007-2008	Scientific responsible for the research project «MOSES – Motorways of the Sea» of the 6th Framework Programme for Research of the EU.
2006-2008	Scientific responsible for the research project "Integration of fleet monitoring and safety technologies for the management of integrated transport supply changes in the liquid fuel sector" funded through the

management of integrated transport supply changes in the liquid fuel sector" funded through the «Competitiveness» Programme of the General Secretariat for Research and Technology of the Ministry of Development (Greece).

2006-2007 Scientific responsible for the research project "Integrated systems for vehicle and cargo monitoring in intermodal

transport" funded through the «Competitiveness» Programme of the General Secretariat for Research and

Technology of the Ministry of Development (Greece).

2008 Scientific responsible for the research project «EURIDICE - European Inter-Disciplinary Research on Intelligent

Cargo for Efficient, Safe and Environment-friendly Logistics» of the 7th Framework Programme for Research of

the EU.

2007-2008 Participation in the project «The Study and Implementation of Intelligent Transport Systems and Development of

a Geographic Information System» funded by the Ministry of Transport and Public Works (Cyprus)

IBI Group U.K. Ltd.

1999 Participation in the study for the determination of the impact of the relocation of the Athens International Airport

to the commute of the airport workers.

1999-2000 Participation in the design, development and implementation of the Integrated Toll and Traffic Management

System of the Attica Tollway.

2007-2008 Participation in the project «Feasibility Study on Deploying Advanced Technologies in Incident Management»,

funded by the Transport Department, The Government of the Hong Kong SAR.

# Ecole Polytechnique Federale de Lausanne, Institute of Mathematics, Operations Research Group

2001 Participation in the research project: "Traffic management plan: pilot survey in Western Switzerland" (Sponsor:

Swiss Federal Roads Office)

DENCO Ltd.

1997 Participation in the study for the forecast of traffic for the then-planned underwater tunnel under the Malliakos

Gulf.

# ANNEX 2. List of selected publications (grouped, more recent in the top within group)

# A3.1. Theses

- 1.3. C. Antoniou, Online calibration for dynamic traffic assignment, PhD Thesis, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, September 2004.
- 1.2. C. Antoniou. Demand estimation for dynamic traffic assignment. MS Thesis, Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, January 1997.
- 1.1. C. Antoniou. Development of a Geographical Information System for the management of road safety. Diploma Thesis, Department of Transportation Planning and Engineering, National Technical University of Athens, June 1995. (in Greek)

# A3.2. Books and book chapters

- 2.26. Straubinger A., Kluge U., Fu M., Al Haddad C., Ploetner K.O., Antoniou C. (2020) Identifying Demand and Acceptance Drivers for User Friendly Urban Air Mobility Introduction. In: Müller B., Meyer G. (eds) Towards User-Centric Transport in Europe 2. Lecture Notes in Mobility. Springer, Cham
- 2.25. Antoniou, C., D. Efthymiou and E. Chaniotakis (2019). Demand for Emerging Transportation Systems. Modeling Adoption, Satisfaction and Mobility Patterns, Elsevier (ISBN: 9780128150184).
- 2.24. A. W. Davis, A. Polydoropoulou, A. Stathopoulos, B. Farooq, C. R. Bhat, C. Antoniou, J. Zhang, K. G. Goulias, K. Mohammadian, M. Kamargianni, P. L. Mokhtarian, R. M. Pendyala and Y. Shiftan (2019). Workshop summary and research themes. In K. G. Goulias and A. W. Davis (eds), Mapping the Travel Behavior Genome, 1st Edition, 9780128173404.
- 2.23. Durán-Rodas, D., E. Chaniotakis, G. Wulfhorst and C. Antoniou (2019). Open source data-driven method to identify most influencing spatiotemporal factors. An example of station-based bike sharing. In K. G. Goulias and A. W. Davis (eds), Mapping the Travel Behavior Genome, 1st Edition, 9780128173404.
- 2.22. Antoniou, C., D. Shach-Pinsly, F. Sprumont and S. Gasparovic (2019). A typology of urban analysis models. In Plaut, P. O., & Shach-Pinsly, D. (Eds). Digital Social Networks and Travel Behaviour in Urban Environments. Routledge (London), ISBN: 9780429488719.
- 2.21. Chaniotakis, E., L. Dimitriou and C. Antoniou (2019). Social Media and Travel Behavior. In Plaut, P. O., & Shach-Pinsly, D. (Eds). Digital Social Networks and Travel Behaviour in Urban Environments. Routledge (London), ISBN: 9780429488719.
- 2.20. Muntean, M. et al., Identifying key priorities in support to the EU Macro-regional Strategies implementation An ex-ante assessment for the Adriatic-Ionian and Alpine regions focusing on clean growth in transport and bioenergy, European Commission, Ispra, 2019, JRC110395.
- 2.19. Antoniou, C., L. Dimitriou, and F. Pereira (2018). Mobility Patterns, Big Data and Transport Analytics. Tools and Applications for Modeling, Elsevier (ISBN: 9780128129708)
- 2.18. Antoniou, C., and I. Spyropoulou (2016). Principles of Transportation Engineering and Simulation. Textbook developed within the Kallipos (kallipos.gr) initiative (freely available in pdf and epub formats), in Greek (277 p.).
- 2.17. Antoniou, C., G. Yannis, E. Papadimitriou, and S. Lassarre (2015). Improving fatalities forecasting in times of recession in Europe. In OECD/IRTAD, Why does Road Safety Improve When Economic Times are Hard?, Research Report, International Transport Forum.
- 2.16. Papathanasopoulou, V. and C. Antoniou (2015). Simulation optimization of car-following models using flexible techniques. In N. D. Lagaros and M. Papadrakakis (eds), Engineering and Applied Sciences Optimization. Dedicated to the memory of Professor M.G. Karlaftis, Springer, pp. 87-106.
- 2.15. Antoniou, C. and N. Picard (2015). Urban sustainability and individual/household well-being, in A. Michelangeli (ed.), Quality of Life in Cities. Equity, Sustainable Development and Happiness from a Policy Perspective. Routledge, pp. 110-142.
- 2.14. Antoniou, C. (2014). Microsimulation, in M. Garrett (ed.), Encyclopedia of Transportation. Social Science and Policy. Sage Publications, Inc.
- 2.13. Antoniou, C. (2014). Traffic simulation, in M. Garrett (ed.), Encyclopedia of Transportation. Social Science and Policy. Sage Publications, Inc.
- 2.12. Antoniou, C. (2014). Highway safety, in M. Garrett (ed.), Encyclopedia of Transportation. Social Science and Policy. Sage Publications, Inc.

- 2.11. Proost, S., S. van der Loo, C. Antoniou and D. Efthymiou (2014). Indicators of sustainable development for microsimulation models, in R. Hurtubia, M. Bierlaire, P. Waddell and A. de Palma (eds.), Handbook on Integrated transport and land use modeling for sustainable cities, EPFL Press, Lausanne, pp. 293-306.
- 2.10. Antoniou, C. and N. Picard (2014). Econometric methods for land use microsimulation, in R. Hurtubia, M. Bierlaire, P. Waddell and A. de Palma (eds.), Handbook on Integrated transport and land use modeling for sustainable cities, EPFL Press, Lausanne, pp. 219-236.
- 2.9. Antoniou, C., J. Casas, H. Koutsopoulos and R. Liu (2014). Validation. In: W. Daamen, C. Buisson, S. Hoogendoorn (eds), Traffic Simulation and Data: Validation Methods and Applications. CRC Press.
- 2.8. Hoogendoorn, S., C. Antoniou, C., T. Schreiter, Y. Yuan, J. Barcelo, C. Buisson, V. Punzo and H. van Lint (2014). Data processing and enhancement techniques. In: W. Daamen, C. Buisson, S. Hoogendoorn (eds), Traffic Simulation and Data: Validation Methods and Applications, CRC Press.
- 2.7. Antoniou, C., J. Barcelo, M. Brackstone, H.B. Celikoglu, B. Ciuffo, V. Punzo, P. Sykes, T. Toledo, P. Vortisch and P. Wagner (2014), Traffic Simulation: Case for Guidelines, (M. Brackstone, V. Punzo, eds), JRC Scientific and Technical Research Report, EUR 26534 EN. Publications Office of the European Union, Luxembourg. ISBN 978-92-79-35578-3.
- 2.6. Antoniou, C., M. Ben-Akiva, and H. N. Koutsopoulos (2010). "Kalman Filter Applications for Traffic Management". In V. Kordic (ed.) "Kalman Filter". (ISBN: 978-953-307-094-0), INTECH, pp. 1-28.
- 2.5. Antoniou, C. Towards dynamic management and control of transport networks for effective emergency response. In "Prevention and management of natural disasters. The role of the surveying engineer". Special volume in memory of Prof. Petros Vythoulkas, NTUA, 2010 (in Greek).
- 2.4. M. Ben-Akiva, H.N. Koutsopoulos, T. Toledo, Q. Yang, C.F. Choudhury, C. Antoniou, and R. Balakrishna (2010). "Traffic Simulation with MITSIMLab". In J. Barcelo (ed.) "Fundamentals of traffic simulation". (ISBN: 978-1-4419-6141-9), Springer.
- 2.3. M. Ben-Akiva, H. N. Koutsopoulos, C. Antoniou and R. Balakrishna (2010). "Traffic Simulation with DynaMIT". In J. Barcelo (ed.) "Fundamentals of traffic simulation". (ISBN: 978-1-4419-6141-9), Springer.
- 2.2. C. Antoniou (2007). "Online calibration for dynamic traffic assignment. Theory, methods and application". VDM Verlag Dr. Müller. (ISBN: 978-3-8364-2141-6)
- 2.1. M. Ben-Akiva and C. Antoniou (2005). Predictive Traffic Information and Travel Time Reliability: DynaMIT Case Studies. In H. van Zuylen (ed.) "The reliability of traveling and the robustness of transport systems", TRAIL Research School.

# A3.3. International journals

- 3.116. Antoniou, C. (2020): The accelerating transport innovation revolution: a global, case study-based assessment of current experience, cross-sectorial effects, and socioeconomic transformations, Transport Reviews, DOI: 10.1080/01441647.2020.1779385
- 3.115. Cantelmo, G., C. Antoniou and R. Kucharski (2020). A Low Dimensional Model for Bike Sharing Demand Forecasting That Explicitly Accounts for Weather Data. Transportation Research Record: Journal of the Transportation Research Board, doi: 10.1177/0361198120932160
- 3.114. Mahajan, V., C. Katrakazas and C. Antoniou (2020). Prediction of Lane Changing Maneuvers with Automatic Labeling and Deep Learning. Transportation Research Record: Journal of the Transportation Research Board, doi: 10.1177/0361198120922210
- 3.113. Ma, T., C. Antoniou and T. Toledo (2020). Hybrid machine learning algorithm and statistical time series model for network-wide traffic forecast. Transportation Research Part C: Emerging Technologies, 111, pp. 352–372.
- 3.112. Al Haddad, C., E. Chaniotakis, A. Straubinger, K. Plötner, C. Antoniou (2020). Factors affecting the adoption and use of urban air mobility. Transportation Research Part A: Policy and Practice, 132, pp. 696–712.
- 3.111. Narayanan, S., E. Chaniotakis, C. Antoniou (2020). Shared Autonomous Vehicle Services: a Comprehensive Review. Transportation Research Part C: Emerging Technologies, 111, pp. 255-293.
- 3.110. Tirachini, A., and C. Antoniou (2020). The economics of automated public transport: effects on operator cost, travel time, fare and subsidy. Research in Transportation Economics, 21, 100151
- 3.109. Ezzati Amini, R., C. Katrakazas and C. Antoniou (2019). Negotiation and Decision-Making for a Pedestrian Roadway Crossing: A Literature Review. Sustainability 2019, 11(23), 6713; https://doi.org/10.3390/su11236713

- 3.108. Karnberger, S. and C. Antoniou (2020). Network-Wide Prediction of Public Transportation Ridership Using Spatio-Temporal Link-Level Information. Journal of Transport Geography.
- 3.107. Cantelmo, G., M. Qurashi, A. Arun Prakash, C. Antoniou and F. Viti (2019). Incorporating trip chaining within online demand estimation. Transportation Research Part B: Methodological. https://doi.org/10.1016/j.trb.2019.05.010
- 3.106. Rothfeld, R., A. Straubinger, A. Paul and C. Antoniou (2019). Analysis of European Airports' Access and Egress Travel Times using Google Maps. Transport Policy. https://doi.org/10.1016/j.tranpol.2019.05.021
- 3.105. Qurashi, M., T. Ma, E. Chaniotakis and C. Antoniou (2019). PC-SPSA: Employing Dimensionality Reduction to Limit SPSA Search Noise in DTA Model Calibration, in IEEE Transactions on Intelligent Transportation Systems. doi: 10.1109/TITS.2019.2915273
- 3.104. Theofilatos, A., C. Chen, and C. Antoniou (2019). Comparing Machine Learning and Deep Learning Methods for Real-Time Crash Prediction. Transportation Research Record: Journal of the Transportation Research Board.
- 3.103. Fu, M., R. Rothfeld, and C. Antoniou (2019). Exploring Preferences for Transportation Modes in an Urban Air Mobility Environment: a Munich Case Study. Transportation Research Record: Journal of the Transportation Research Board.
- 3.102. Duran-Rodas, D., E. Chaniotakis and C. Antoniou (2019). Built Environment Factors Affecting Bike Sharing Ridership: A Data-Driven Approach for Multiple Cities. Transportation Research Record: Journal of the Transportation Research Board.
- 3.101. Papathanasopoulou, V., and C. Antoniou (2018). Flexible car–following models for mixed traffic and weak lane–discipline conditions, European Transport Research Review, 10:62. Available online: https://rdcu.be/bePko (open access)
- 3.100. Ma, T, Z. Zhou, and C. Antoniou (2018). Dynamic Factor Model for Network Traffic State Forecast, Transportation Research Part B: Methodological, 118, p. 281-317.
- 3.99. Li, D., C. Antoniou, H. Jiang, Q. Xie, W. Shen, W. Han (2019). The value of prepositioning in smartphone-based vanpool services under stochastic requests and time-dependent travel times. Transportation Research Record: The Journal of the Transportation Research Board (accepted).
- 3.98. Sfeir, G., C. Antoniou and N. Abbas (accepted). Simulation-based evacuation planning using state-of-the-art sensitivity analysis techniques. Simulation Modelling Practice and Theory. https://doi.org/10.1016/j.simpat.2018.09.017
- 3.97. Kouskoulis, G., I. Spyropoulou and C. Antoniou (2018). Pedestrian simulation: Theoretical models vs. data driven techniques. International Journal of Transportation Science and Technology, https://doi.org/10.1016/j.ijtst.2018.09.001
- 3.96. Papantoniou, P., C. Antoniou, G. Yannis, D. Pavlou (accepted). Which factors affect accident probability at unexpected incidents? A Structural equation model approach. Journal of Transportation Safety & Security.
- 3.95. Prakash, A. A., R. Seshadri, C. Antoniou, F. C. Pereira and M. Ben-Akiva (2018). Improving scalability of generic online calibration of dynamic traffic assignment systems. Transportation Research Record: Journal of the Transportation Research Board.
- 3.94. Dimitriou, L., D. Efthymiou, and C. Antoniou (accepted). Saving lives through faster emergency unit response times: The role of accessibility and environmental factors. Journal of Transportation Engineering, Part A: Systems
- 3.93. Markou, I., V. Papathanasopoulou, and C. Antoniou (accepted). Dynamic car–following model calibration using SPSA and ISRES algorithms. Periodica Polytechnica
- 3.92. Dimitriou, L., P. Nikolaou, and C. Antoniou (accepted). Exploring the temporal stability of global road safety statistics. Accident Analysis and Prevention.
- 3.91. Efthymiou D., C. Antoniou, Y. Tyrinopoulos and E. Skaltsogianni (accepted). Factors Affecting Bus Users' Satisfaction in Times of Economic Crisis. Transportation Research Part A: Policy and Practice.
- 3.90. Milakis D., D. Efthymiou and C. Antoniou (2017). Built Environment, Travel Attitudes and Travel Behaviour: Quasi-Longitudinal Analysis of Links in the Case of Greeks Relocating from US to Greece. Sustainability 2017, 9, 1774; doi:10.3390/su9101774
- 3.89. Dimitriou, L. and C. Antoniou (accepted). Monitoring Social Network Formation and Information Content Analysis of Transport Anomalies: the Case of Airline Crashes, Journal of Air Transport Management (in press).
- 3.88. Antoniou, C., V. Gikas, V. Papathanasopoulou, T. Mpimis, H. Perakis, C. Kyriazis (2017). A framework for risk reduction for indoor parking facilities under constraints using positioning technologies, International Journal of Disaster Risk Reduction (in press)

- 3.87. Antoniou, C., G. Yannis, E. Papadimitriou, S. Lassarre, J. F. Commandeur, F. Bijleveld and E. Dupont (2017). Forecasting the Number of Road Traffic Fatalities in Greece, International Journal of Transportation, Special Issue: Road Safety in Europe Part II, Vol. 5, No. 2, pp. 1-14.
- 3.86. Hale, D.K., C. Antoniou, B.B. Park, J. Ma, L. Zhang, A. Paz (2017) Revisiting the Application of Simultaneous Perturbation Stochastic Approximation towards Signal Timing Optimization, Journal of Intelligent Transportation Systems (in press)
- 3.85. Pavlou, D., E. Papadimitriou, C. Antoniou, P. Papantoniou, G. Yannis, J. Golias, S. Papageorgiou (2017). Comparative assessment of the behaviour of drivers with Mild Cognitive Impairment or Alzheimer's disease in different road and traffic conditions. Transportation Research: Part F, Volume 47, Pages 122-131.
- 3.84. Wegman, F., Allsop, R., Antoniou, C., Bergel-Hayat, R., Elvik, R., Lassarre, S., Lloyd, D., Wijnen, W. (2017) How did the economic recession (2008–2010) influence traffic fatalities in OECD-countries? Accident Analysis and Prevention Volume 102, 1 May 2017, Pages 51-59
- 3.83. Theofilatos, A., G. Yannis, C. Antoniou, A. Chaziris and D. Sermpis (in press). Time Series and Support Vector Machines to Predict Powered-Two-Wheeler Accident Risk and Accident Type Propensity: A Combined Approach. Journal of Transportation Safety & Security (in press).
- 3.82. Papantoniou, P., C. Antoniou, D. Pavlou, E. Papadimitriou, G. Yannis, J. Golias (2017). Exploratory analysis of the effect of distraction on driving behaviour through a driving simulator experiment, International Journal of Transportation, Special Issue: Road Safety in Europe Part I, Vol. 5, No. 1, pp. 35-46.
- 3.81. Prakash, A. A., R. Seshadri, C. Antoniou, F. C. Pereira and M. Ben-Akiva (2017). Reducing the dimension of online calibration in dynamic traffic assignment systems. Transportation Research Record: Journal of the Transportation Research Board (in press).
- 3.80. Zhang, H., R. Seshadri, A. Prakash, F. C. Pereira, C. Antoniou, and M. Ben-Akiva (2017). Constrained Extended Kalman Filter: an Efficient Improvement of Calibration for Dynamic Traffic Assignment Models. Transportation Research Record: Journal of the Transportation Research Board (in press).
- 3.79. Kouskoulis, G. and C. Antoniou (2017). A systematic review of pedestrian simulation models with a focus on emergency situations. Transportation Research Record: Journal of the Transportation Research Board (in press).
- 3.78. Chaniotakis, E., C. Antoniou, G. Aifadopoulou and L. Dimitriou (2017). Infering activities from Social Media data. Proceedings of the 96th Annual Meeting of the Transportation Research Board, January 2017, Washington, D.C.
- 3.77. Kostovasili, M., and C. Antoniou (2017). Simulation-based evaluation of evacuation effectiveness using driving behavior sensitivity analysis. Simulation Modelling Practice and Theory, 70, 135-148.
- 3.76. Efthymiou, D., and C. Antoniou (2017). Understanding the effects of economic crisis on public transport users' satisfaction and demand, Transport Policy, 53, pp. 89-97.
- 3.75. Chaniotakis, E., C. Antoniou, and F. Pereira (2016). Mapping Social Media for Transportation Studies, IEEE Intelligent Systems Magazine, November/December 2016, 31(6), 64-70..
- 3.74. Gikas, V., C. Antoniou, G. Retscher, A.D. Panagopoulos, H. Perakis, A. Kealy and T. Mpimis (accepted). A Low-Cost Wireless Sensors Positioning Solution For Indoor Parking Facilities Management. Journal of Location Based Services (accepted).
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- 3.72. Naharajan, S., N. Sairam and C. Antoniou (2016). Integration of Images and Laser Scanning Data for Automated 3D Road Feature Extraction. Surveying and Land Information Science, Volume 75, Number 2, November, pp. 49-63(15).
- 3.71. Antoniou, C. and K. Kostovasilis (accepted). How may external information affect traffic risk perception? Journal of Transportation Safety and Security, 9 (3), 347-368.
- 3.70. Papathanasopoulou, V., I. Markou and C. Antoniou (2016). Online calibration for microscopic traffic simulation and dynamic multi-step prediction of traffic speed. Transportation Research Part C: Emerging Technologies, 68, pp. 144-159.
- 3.69. Antoniou, C., G. Yannis, E. Papadimitriou, and S. Lassarre (2016). Relating traffic fatalities to GDP in Europe on the long term, Accident Analysis and Prevention, 92, pp. 89-96.

- 3.68. Pavlou, D., P. Papantoniou, E. Papadimitriou, S. Vardaki, G. Yannis, C. Antoniou, J. Golias, S.G. Papageorgiou (accepted). Which are the effects of driver distraction and brain pathologies on reaction time and accident risk? RSS2015 Special Issue of ATS Advances in Transportation Studies, an International Journal (accepted).
- 3.67. Antoniou, C., J. Barceló, M. Breen, M. Bullejos, J. Casas, E. Cipriani, B. Ciuffo, T. Djukic, S. Hoogendoorn, V. Marzano, L. Montero, M. Nigro, J. Perarnau, V. Punzo, T. Toledo and H. van Lint (accepted). Towards a generic benchmarking platform for OD flows estimation/updating algorithms: design, demonstration and validation. Transportation Research Part C, 66, pp. 79-98.
- 3.66. Efthymiou, D., and C. Antoniou (2016). Modeling the propensity to join carsharing using hybrid choice models and mixed survey data. Transport Policy, 51, 143-149.
- 3.65. Antoniou, C., C. L. Azevedo, L. Lu, F. Pereira and M. Ben-Akiva (2015). W-SPSA in practice: Approximation of weight matrices and calibration of traffic simulation models. Transportation Research Part C: Emerging Technologies, Vol. 59, October, pp. 129-146.
- 3.64. Antoniou, C., V. Gikas, V. Papathanasopoulou, C. Danezis, A. Panagopoulos, I. Markou, H. Perakis, D. Efthymiou and G. Yannis (2015). Localization and driving behavior classification using smartphone sensors in the direct absence of GNSS. Transportation Research Record: Journal of the Transportation Research Board, 2489, pp. 66-76.
- 3.63. Papathanasopoulou, V., and C. Antoniou (2015). Towards data-driven car-following models. Transportation Research Part C, Vol. 55, pp. 496-509.
- 3.62. Hale, D.K, C. Antoniou, M. Brackstone, D. Michalaka, A. T. Moreno and K. Parikh (2015). Optimization-based assisted calibration of traffic simulation models. Transportation Research Part C, Vol. 55, pp. 100-115.
- 3.61. Lu, L., Y. Xu, C. Antoniou and M. Ben-Akiva (2015). An Enhanced SPSA Algorithm for the Calibration of Dynamic Traffic Assignment Models. Transportation Research Part C, 51, pp. 149-166.
- 3.60. Efthymiou, D., and C. Antoniou (2015). Investigating the impact of recession on transportation cost capitalization: a spatial analysis. Journal of Transport Geography, 42, pp. 1-9.
- 3.59. Spyropoulou, I. and C. Antoniou (2015). Determinants of driver response to variable message sign information in Athens. IET Intelligent Transportation Systems, 9(4), pp. 453-466.
- 3.58. Dupont, E., Commandeur, J. J., Lassarre, S., Bijleveld, F., Martensen, H., Antoniou, C., E. Papadimitriou, G. Yannis, E. Hermans, K. Perez, E. Santamarina-Rubio, D. S. Usami & Giustiniani, G. (2014). Latent risk and trend models for the evolution of annual fatality numbers in 30 European countries. Accident Analysis & Prevention, 71, 327-336.
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- 3.56. Efthymiou, D., B. Farooq, M. Bierlaire and C. Antoniou (2014). Multidimensional indicators analysis for transport policy evaluation. Transportation Research Record: Journal of the Transportation Research Board, Vol. 2430, pp. 83-94.
- 3.55. Efthymiou, D., M. Kaziales, C. Antoniou and Y. Tyrinopoulos (2014). Measuring the Effects of Economic Crisis on User Perception of Public Transport Quality. Transportation Research Record: Journal of the Transportation Research Board, Vol. 2415, pp. 1-12.
- 3.54. Papadopoulou, M. and C. Antoniou (2014). Environmental impact assessment methodological framework for Liquefied Natural Gas terminal and transport network planning. Energy Policy, 68, pp. 306-319.
- 3.53. Dimoulas, S., B. Psarianos, C. Antoniou, and S. Vardaki (2014). Powered two-wheeler rider eye-height determination. Transportation Letters, 6(2), pp. 67-77.
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- 3.50. Tyrinopoulos, Y. and C. Antoniou (2014). Analysis of passengers' perception of public transport quality and performance. International Journal of Information Systems and Supply Chain Management (IJISSCM), 7(1), 56-72.
- 3.49. Antoniou, C., E. Papadimitriou and G. Yannis (2014). Road safety forecasts in five European countries using structural time-series models. Traffic Injury Prevention, Volume 15, Issue 6, pp. 598-605.
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# **ANNEX 3. Reviewing responsibilities**

Reviewer for over 65 scientific journals, more than 100 international scientific conferences, national scientific conferences, as well as research proposals in more than 15 research organizations from Europe, Middle East, South America and North America.

# Reviewer in International Scientific Journals, including

- Accident Analysis and Prevention
- ACM Transactions on Cyber-Physical Systems
- Advances in Transportation Studies
- American Society of Civil Engineers (ASCE) Journal of Transportation Engineering (JTE)
- Automation in Construction
- Canadian Journal of Civil Engineering
- Case Studies on Transport Policy
- Computer-Aided Civil and Infrastructure Engineering (CACAIE)
- Computing in Science and Engineering
- Electronics
- Environmental Health Perspectives
- European Journal of Transport and Infrastructure Research
- EURO Journal on Transportation and Logistics
- European Transport Research Review
- ICE Transport
- IEEE Access
- IEEE Intelligent Transportation Systems Magazine
- IEEE Internet Computing
- IEEE Transactions on Intelligent Transportation Systems
- IEEE Transactions on Knowledge and Data Engineering
- IET Intelligent Transport Systems
- International Journal of Environmental Research and Public Health
- International Journal of Forecasting
- International Journal of Sustainable Transportation (IJST)
- International Journal of Transportation
- International Journal of Intelligent Transportation and Urban Planning (ITUP)
- ISPRS International Journal of Geo-Information
- Journal of Advanced Transportation
- Journal of Applied Research and Technology
- Journal of Property Research
- Journal of Traffic and Transportation Engineering
- Journal of Transport and Shipping
- Journal of Transportation Safety and Security
- Mathematical Modeling
- Nature Scientific Reports
- Networks and Spatial Economics
- Ocean Systems Management Journal
- Papers in Regional Science
- Reliability Engineering & System Safety
- Research in Transportation Economics
- Safety Science
- Simulation Modeling Practice and Theory (SIMPAT)
- Simulation: Transactions of the Society for Modeling and Simulation International
- Software: Practice and Experience
- SpringerPlus
- Sustainable Cities and Society
- Systems
- The Computer Journal
- The Lancet Planetary Health
- Tourism Geographies
- Transport Policy
- Transportation

- Transportation Letters
- Transportation Research Part A: Policy and Practice
- Transportation Research Part B: Methodological
- Transportation Research Part C: Emerging Technologies
- Transportation Research Part D: Transport and Environment
- Transportation Research Part E: Logistics and Transportation Review
- Transportation Research Part F: Traffic Psychology and Behavior
- Transportation Research Record: Journal of the Transportation Research Board
- Transportation Science
- Transportmetrica A Transport Science (and the preceding Transportmetrica)
- Transportmetrica B Transport Dynamics
- Travel Behavior and Society
- Urban, Planning and Transport Research