

CURRICULUM VITAE

Athanasios (Akis) Theofilatos, MSc, PhD, FHEA



Assistant Professor in Sustainable Transport Planning, University of Thessaly

Personal Details

Name : Athanasios (Akis) Theofilatos
Date of birth : 3 October 1983
Nationality : Hellenic (Greek)
Working Address : Department of Civil Engineering, Volos, GR38334, Greece
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Research Interests

- Road safety & Accident analysis
- Statistical and econometric methods
- Machine learning/deep learning
- Sustainable Urban Mobility
- Big data and imbalanced learning
- Transportation Engineering
- Stated preference methods

Education

- **Fellow of UK Higher Education Academy** (FHEA). October 2021.
- **Doctor of Philosophy** (PhD) in the field of Transport Safety, Department of Transportation Planning and Engineering, National Technical University of Athens, December 2010 – November 2015.
- **Master of Science** (MSc & DIC) in Transport and Diploma Imperial College (DIC), Imperial College London and UCL, October 2009 – September 2010, Grade B (merit).
- **Diploma of Civil Engineering** (MEng), National Technical University of Athens, Major in Transportation Engineer, October 2003 – March 2009, Grade 7/10.

Professional History

- **Assistant Professor in Sustainable Transport Planning**, Department of Civil Engineering, University of Thessaly, Greece (2022 –)
- **Lecturer (Assistant Professor) in Transport Systems**, School of Architecture, Building and Civil Engineering, Loughborough University, Loughborough UK (2019 – 2022)
- **Marie Curie Fellow – Postdoctoral Researcher**, Chair of Transportation Systems Engineering, Technical University of Munich (2018 – 2019)
- **Research Associate**, Department of Transportation Planning and Engineering, National Technical University of Athens (2010 – 2018)
- **Civil Engineer** at the Cadastral Department at National Defence Fund, Greek Army (2014 – 2015)

Educational and teaching qualifications

- **Fellow of Higher Education Academy (FHEA)**, Sept 2021
- **AdvanceHE Level 7 Apprenticeship**, Sept 2021
 - *Written submission examination*, Distinction
 - *Academic Professional Practice Assessment*, Pass
 - *Professional Conversation*, Pass

Teaching, Tutoring & Administration

- University of Thessaly (2022-)

- **Full-time Assistant Professor** in the Undergraduate (UG) courses of the MEng courses in Civil Engineering (2022 –).
 - **Sustainable Urban Mobility (module leader) (2022-)**
 - **Highway Design II (module leader) (2022-)**
 - **Public Transport (module leader) (2022-)**

- Loughborough University (LU) (2019-2022)

- **Full-time Lecturer (Assistant Professor)** in the Undergraduate (UG) courses of the BSc courses in Air Transport Management & Transport and Business Management (2019 – 2021), as well as the BSc course in Urban Planning (2020 – 2022), and MEng in Civil Engineering (2021 –2022).
 - **Urban Planning and the Environment (module leader) (2021–2022)**
 - **Transport Infrastructure Engineering (2021–2022)**
 - **Professional Practice in Urban Planning (2021–2022)**
 - **Transport and the Environment (module leader) (2019–2021)**
 - **Module evaluation:**
 - N/A for 2020 due to covid19
 - 4.23/5 (2021)
 - **Lecturer evaluation:**
 - N/A for 2020 due to covid19
 - 3.98/5 (2021)
 - **Design Skills & Urban Data Analytics (module leader) (2020–2021)**
 - **Module evaluation:** 3.87/5 (2021)
 - **Lecturer evaluation:** 4.33/5 (2021)
 - **Transport Research Methods and Digital Skills (2019–2022)**
 - **Module evaluation:**
 - N/A for 2020 due to covid19
 - 3.45/5 (2021)

- **Lecturer evaluation:**
 - N/A for 2020 due to covid19
 - 4.44/5 (2021)
 - **Transport Planning (2019–2021)**
 - **Module evaluation:**
 - 4.13/5 (2020)
 - 3.67/5 (2021)
 - **Lecturer evaluation:**
 - 4.21/5 (2020)
 - 4.00/5 (2021)
 - **Transport Futures (2020–2021)**
 - **Module evaluation:** 3.81/5 (2021)
 - **Lecturer evaluation:** 4.17/5 (2021)
 - **Global Logistics and Management (2019–2020)**
 - **Module evaluation:** (N/A for 2020 due to covid19)
 - **Lecturer evaluation:** (N/A for 2020 due to covid19)
- **Primary supervisor** of 1 PhD Students
- **Secondary supervisor** of 2 PhD Students
- **PhD advisory board** of 1 PhD Student
- **PhD Examiner** of 2 PhD theses (Loughborough University)
- **Second Year (Part B) Undergraduate Tutor** (2019 – 2022)
 - Student inductions, Mentoring, Academic-Personal and Pastoral care, Mitigating circumstances panels, Exam Board panels
- **Supervision** of 8 UG theses
- **Personal tutor** of 12 UG students
- **Personal tutor** of 7 UG student in industrial placement (DIS)

Formative and Summative evaluation of teaching at Loughborough University

- **Formative Teaching outcome** (by Senior Member of Staff, ABCE School, LU)
 - *Meets expectations* (November 2019)
- **Summative Teaching outcome** (by Centre of Academic Practice, LU)
 - *Exceeds expectations* (March 2020)
- **Formative Teaching outcome** (by Senior Member of Staff, ABCE School, LU)
 - *Exceeds expectations* (November 2020)
- **Summative Teaching outcome** (by Centre of Academic Practice, LU)
 - *Exceeds expectations* (March 2021)

Training in Teaching & Pedagogy (at Loughborough University)

- **Learning and Teaching at Loughborough University** (2019)
 - *Effective holistic learning*
 - *Teaching methods; approaches to student learning; and ways of supporting student engagement*
 - *Voice training*
 - *Effective academic tutoring*
- **Communication and Digital Literacy Capabilities** (2020)
 - *Writing grant applications*
 - *Awareness of academic digital identity*

- *Use of technology to enhance student learning*
- **Research and Enterprise (2021)**
 - *Publication strategy*
 - *Effective supervision strategies*
 - *Strategies to incorporate research into academic practice*
 - *Critical understanding of enterprise into the curricula*

Other training for the academic role (at Loughborough University)

- *Introduction to Learning and Teaching at Loughborough University*
- *Inclusive teaching*
- *Preparing the modules for the online system “Learn”*
- *Respecting diversity*
- *Export Control*
- *Bribery act*
- *Unconscious Bias*
- *Fire Safety Awareness*
- *Enterprise clinics*
- *Covid19 safe practices*

Other Teaching and Supervising Experience

- **Adjunct Lecturer** (fixed term-Autumn semester 2017–2018)
 - **Transport Analysis**, (module leader) of Transport and Planning MSc Programme at Cardiff University, UK.
 - *Module evaluation 4.00/5 (2017)*
- **Teaching Assistant** in the graduate courses
 - **Traffic Flow**, of the 7th semester of the School of Civil Engineering of NTUA (2011 – 2018)
 - **Traffic Management and Road Safety**, of the 9th semester of the School of Civil Engineering of NTUA (2011 – 2018)
- **Co-supervisor** of 1 PhD student and 1 MSc student in Technical University of Munich
- **Supervising assistant** in 11 Diploma Theses in the School of Civil Engineering of the National Technical University of Athens (2011 – 2018)
- **Co-supervisor** of 1 MSc student in the School of Civil Engineering of the National Technical University of Athens (ERASMUS Student) (2017)

Grants

- **Co-I** on project: **Bus MONITOR**. Knowledge transfer partnerships (KTP) with Vectare Ltd. *Funder: Innovate UK. Duration: 2021-2022. Total Budget: 194,911£. Loughborough University Budget: 90,000£.*
- **Co-I** on project: **LUSTRE: Lower urban speed limits in Europe – what does the evidence show?** *Funder: Road Safety Trust. Duration: 2020-2020. Total Budget: 61,200£. Loughborough University Budget: 23,200£.*
- **Co-I** on project: **Developing countermeasures for work-related road safety on the SRN**. Externally funded PhD. *Funder: Highways England. Duration: 2020-2023. Total Budget- Loughborough University Budget: 45,000£.*
- **PI on Marie-Curie (MSCA COFUND) Eurotech Postdoc**, European Union’s Horizon 2020 research and innovation programme under the Marie

Skłodowska-Curie grant agreement No 754462. Research Proposal: **SPARTAN-Safety analysis and ProActive Real-time Traffic management considering AutoNomous vehicles**. *Duration: 2018-2019. Total Budget.* Host institute: Technical University of Munich. Co-host institute: DTU.

- **PI (Postdoctoral Studies)**, State Scholarships Foundation (IKY), co-funded by the European Social Fund and the Greek public. Research Proposal: **Correlating road accidents with high resolution traffic and weather data**. *Duration: 2017–2018. Total Budget: 26,145.84€.*

Research Projects Experience

- r12. Participation in the project **LEVITATE** (Societal Level Impacts of Connected and Automated Vehicles) of the Horizon 2020 framework programme on transport research of the European Commission (2019 –)
- r11. Participation in the project **CAMP-sUmp** (CAMPus sustainable University mobility plans in MED areas), in the framework of the Interreg MED Programme, co-financed by the European Regional Development Fund (2017 – 2018)
- r10. Participation in the project **SaferAfrica** (Innovating dialogue and problems appraisal for a safer Africa) of the Horizons 2020 framework programme on Research & Innovation of the European Commission. (2018)
- r9. Participation in the project **SAFERWHEELS** carried out for European Commission DG MOVE. (2017)
- r8. Participation in the project **ESRA** (“E-Survey of Road Users’ Attitudes”). (2016 – 2017)
- r7. Participation in the 5M project **SAFETYCUBE** (“Safety Causation, Benefits and Efficiency”) of the Horizons 2020 framework programme on transport research of the European Commission (2015 – 2018). **Task leader** in Task 4.2 "Identification of road user-related measures and their safety effects", managing 2 people at NTUA and 7 institutes-partners. (2017–2018)
- r6. Participation in the project **ROSEE** (“Road safety in South East European regions”) carried out for the European Commission. (2013 – 2015)
- r5. Participation in the project **DISTRACT** (“Causes and impacts of driver distraction: a driving simulator study”) in the framework of the research programme THALIS for the Ministry of Education, Lifelong Learning and Religion Affairs. (2012 – 2015)
- r4. Participation in the project **DRIVERBRAIN** (“Performance of drivers with cerebral diseases at unexpected incidents”) in the framework of the research programme ARISTEIA of the General Secretariat for Research and technology. (2012 – 2015)
- r3. Participation in the project **PEVE 2009** (“Analysis of pedestrians’ road crossing behaviour in urban areas by means of survival analysis”) of the program for the support of basic research of NTUA - PEVE 2009. (2011 – 2012)
- r2. Participation in the project **SARTRE-4** (“Social Attitudes to Road Traffic Risk in Europe”) carried out for the European Commission. (2011 – 2012)
- r1. Participation in the project **2-BE-SAFE** (“Two-Wheeler Behaviour and Safety”) of the seventh framework program on transport research of the European Commission. (2010 – 2011)

List of Publications

Citations of Published Work (17-2-2022)

[Google Scholar Citations](#): 1364, h-index = 18, i₁₀-index=28

[Scopus Citations](#): 819, h-index = 13, i₁₀-index=23

Theses

- d4. Theofilatos A. (2018). “**Correlating road accidents with high resolution traffic and weather data**”, PhD Thesis, National Technical University of Athens, School of Civil Engineering, November 2018. Supervisor: Professor George Yannis.
- d3. Theofilatos A. (2015). “**An advanced multi-faceted statistical analysis of accident probability and severity exploiting high resolution traffic and weather data**”, PhD Thesis, National Technical University of Athens, School of Civil Engineering, November 2015. Supervisor: Professor George Yannis.
- d2. Theofilatos A. (2010). “**Investigation of road accident severity in Greece**”, MSc Thesis, Imperial College London & UCL, September 2010, Grade B. Supervisor: Dr. Daniel J. Graham, Professor.
- d1. Theofilatos A. (2009). “**Investigation of the minimum gap from the vehicle accepted by the pedestrian for mid-block street crossing**”, Diploma Thesis, National Technical University of Athens, School of Civil Engineering, March 2009, Grade 10/10. Supervisor: Professor George Yannis.

Book Chapters

- b2. **Theofilatos A.**, Ziakopoulos A. (in-press). Traffic flow volume and safety. Encyclopedia of Transportation, Elsevier.
- b1. Katrakazas C., **Theofilatos A.**, Papastefanatos G., Härrä J., Antoniou C. (in-press). Cyber security and its impact on road safety for CAVs: State-of-the-art, policy needs and challenges. Policy implications of Autonomous Vehicles, Elsevier.

Journal Papers

- j34. Man C., Quddus M., **Theofilatos A.** (2022). Utilizing Transfer Learning for Temporal and Spatial Transferability of Real-Time Crash Prediction Models. Accident Analysis and Prevention, 165, 106511.
- j33. **Theofilatos A.**, Ziakopoulos A., Oviedo Trespalacios O., Timmis A. (2021). To cross or not to cross? Review and meta-analysis of pedestrian gap acceptance decisions on midblock street crossings. Journal of Transport and Health, 22, 101108.
- j32. **Theofilatos A.**, Ziakopoulos A., Laiou A., Yannis G., Rosenbloom T. (2021). Examining the relationship between impaired driving and past crash involvement in Europe: Insights from the ESRA study. Injury Control and Safety Promotion, 28(3), 376-386.
- j31. Katrakazas C., Islam A., **Theofilatos A.**, Papadimitriou E., Dimitriou L., Antoniou C. (2021). Prediction of rear-end conflicts according to traffic state and the impact of automation in an urban transportation network. Accident Analysis and Prevention, 152, 106007.
- j30. Brown L., Morris A., Ekambaram K., Thomas P., Margaritis D., Yannis G., Ziakopoulos A., **Theofilatos A.**, Davidse R., Butler I., Usami D., Robibaro M., Phan V. (2021). The Nature and Circumstances of Crashes Involving Powered

- Two Wheelers and Bicycles – Results from a European In-depth Study. *Journal of Safety Research*, 76, 135-145.
- j29. **Theofilatos A.**, Antoniou C., Yannis G. (2021). Exploring factors affecting crash injury severity of children and adolescents in Greece. *Journal of Traffic and Transportation Engineering*, 8(4), 596-604.
- j28. Laiou A., **Theofilatos A.**, Yannis G., Meesman U., Torfs, K. (2021). An exploration of European road users' safety attitudes towards speeding. *Journal of Transportation Safety and Security*, 13(5), 552-573.
- j27. Souris C., **Theofilatos A.**, Yannis G. (2019). Attitudes of Greek drivers towards autonomous vehicles – a stated preference approach. *Advances in Transportation Studies, Section B* 48, 105-116.
- j26. **Theofilatos A.**, Cong C., Antoniou C. (2019). Comparing Machine Learning and Deep Learning Methods for Real-Time Crash Prediction. *Transportation Research Record*, 1-10.
- j25. Ziakopoulos A., **Theofilatos A.**, Papadimitriou E., Yannis G. (2019). A meta-analysis of the impacts of operating in-vehicle systems on road safety. *IATSS Research*, 43(3), 185-194.
- j24. Papadimitriou E., Filtness A., **Theofilatos A.**, Ziakopoulos A., Quigley C., Yannis G. (2019). Review and ranking of crash risk factors related to the road infrastructure. *Accident Analysis and Prevention, SI: RSS*, 125, 85-97.
- j23. **Theofilatos A.**, Yannis G., Kopelias P., Papadimitriou F. (2019). Impact of real-time traffic characteristics on crash occurrence: Preliminary results of the case of rare events. *Accident Analysis and Prevention*, 130, 151-159.
- j22. **Theofilatos A.**, Ziakopoulos A. (2018). Examining injury severity of moped and motorcycle occupants with real-time traffic and weather data. *ASCE Journal of Transportation Engineering, Part A: Systems*, 144(11).
- j21. **Theofilatos A.**, Ziakopoulos A., Papadimitriou E., Yannis G. (2018). How many crashes are caused by driver interaction with passengers? A meta-analysis approach. *Journal of Safety Research*, 65 11-20.
- j20. Tselentis D., **Theofilatos A.**, Yannis G., Konstantinopoulos M. (2018). Public opinion on Usage-Based Motor Insurance Schemes: a stated preference approach. *Travel Behaviour and Society*, 11, 111-118.
- j19. Kopelias P., Kepaptsoglou K., Sarantidis V., **Theofilatos A.** (2018). Route Efficiency Index for Detour Decision Making following an Urban Freeway Closure. *Advances in Transportation Studies*, 44, 63-76.
- j18. **Theofilatos A.**, Yannis G., Antoniou C., Chaziris A., Sermpis D. (2018). Time series and Support Vector Machines to Predict Powered-Two-Wheeler Accident Risk and Accident Type Propensity: A Combined Approach. *Journal of Transportation Safety and Security*, 10(5), 471-490.
- j17. Yuan Q., Yang, H., Huang J., Kou S., Li Y., **Theofilatos A.** (2017). What factors impact injury severity of vehicle to electric bike crashes in China? *Advances in Mechanical Engineering*, 9(8) 1-10.
- j16. **Theofilatos A.**, Ziakopoulos A., Papadimitriou E., Yannis G., Diamandouros K. (2017). Meta-Analysis of the Effect of Road Work Zones on Crash Occurrence. *Accident Analysis and Prevention*, 108, 1-8.
- j15. Yannis G., **Theofilatos A.**, Alevizou A. (2017). Critical Factors of Motorcycle Accidents in Greece. *European Transport\Trasporti Europei*, 63, 2017.
- j14. Papadimitriou E., **Theofilatos A.** (2017). A meta-analysis of crash risk factors in freeway entrance and exit areas. *ASCE Journal of Transportation Engineering, Part A: Systems*, 43(10), 04017050.

- j13. **Theofilatos A***. (2017). Incorporating real-time traffic and weather data to explore road accident likelihood and severity in urban arterials. *Journal of Safety Research*, 61, 9-21.
- j12. Yuan Q., Lu M., **Theofilatos A.**, Li Y. (2017). Investigating Driver Injury Severity in Rear-end Crashes Involving Trucks as the Front Vehicle in Beijing Area. *Chinese Journal of Traumatology*, 20(1), 20-26.
- j11. **Theofilatos A.**, Yannis G., Vlahogianni E., Golias J. (2017). Modeling the effect of traffic regimes on safety of urban arterials: the case study of Athens. *Journal of Traffic and Transportation Engineering*, 4(3), 240-251.
- j10. **Theofilatos A.**, Yannis G. (2017). Investigation of Powered-Two-Wheeler accident involvement in urban arterials by considering real-time traffic and weather data. *Traffic Injury Prevention*, 18(3), 293-298.
- j9. Yannis G., **Theofilatos A.**, Marinou P. (2015). Attitudes of Greek drivers with focus on mobile phone use while driving. *Traffic Injury Prevention* 16(8), 831-834.
- j8. **Theofilatos A.**, Yannis G. (2015). A review of powered-two-wheeler behaviour and safety. *Injury Control and Safety Promotion* 22(4), 284-307.
- j7[†]. **Theofilatos A.**, Yannis G. (2014). A review of the effect of traffic and weather characteristics on road safety. *Accident Analysis and Prevention* 72, 244-256.
- j6. Papadimitriou E., **Theofilatos A.**, Yannis G., Cestac J., Kraiem S. (2014). Motorcycle riding under the influence of alcohol: Results from the SARTRE-4 study. *Accident Analysis and Prevention* 70, 121-130.
- j5. Yannis G., **Theofilatos A.**, Ziakopoulos A., Chaziris A. (2014). Investigation of road accident severity and likelihood in urban areas with real-time traffic data. *Traffic Engineering and Control* 55(1), 31-35.
- j4. **Theofilatos A.**, Yannis G. (2014). Relationship between motorcyclists' attitudes, behaviour and other attributes with declared accident involvement in Europe. *Traffic Injury Prevention* 15(2), 156-164.
- j3[‡]. Yannis G., Papadimitriou E., **Theofilatos A.** (2013). Pedestrian gap acceptance for mid-block street crossing. *Transportation Planning and Technology* 36(5), 450-462.
- j2. Papadimitriou E., **Theofilatos A.**, Yannis G. (2013). Patterns of pedestrian attitudes, perceptions and behaviour in Europe. *Safety Science* 53, 114-122.
- j1. **Theofilatos A.**, Graham D.J., Yannis G. (2012). Factors affecting accident severity inside and outside urban areas in Greece. *Traffic Injury Prevention* 13(5), 458-467.

Conference Papers-Full Paper Review

- c49. Mihou-Archimandritou Y., Kallidoni M., Theofilatos A., Yannis G. (2021). Investigation of Road Accident Costs in the European Union. *ICTR 2021*, Rhodes, Greece.
- c48. Montgomery I., Theofilatos A. (2021). Towards liberation of intra-African air transport services through the "Single African Air Transport Market" project. *UTSG*, 2021, Lboro, UK (online).
- c47. Man C.K., Quddus M., **Theofilatos A.** (2021). Utilizing Transfer Learning for Temporal and Spatial Transferability of Real-Time Crash Prediction Models.

* 3rd most cited paper since 2017

†5th most cited in the journal of *Accident Analysis and Prevention* since 2014.

‡4th most cited in the journal of *Transportation Planning and Technology*.

- Transportation Research Board, Annual Meeting, January 2021, Washington DC., US (virtual).
- c46. Man C.K., Quddus M., **Theofilatos A.**, Yu R., Imprialou M.I., (2020). Utilising Generative Adversarial Network (GAN) to address Imbalanced Data Issue in Real-time Crash Risk Prediction. Transportation Research Board, Annual Meeting, 12-16 January 2020, Washington DC., US.
- c45. Rangaswamy R., Bialkowska-Jelinska E., Chen C., Lin P.-S. **Theofilatos A.** (2020). Comparison of Non-Motorist Injury Severities in Rural and Urban Areas in Florida. Transportation Research Board, Annual Meeting, 12-16 January 2020, Washington DC., US.
- c44. **Theofilatos A.**, Yannis G. (2020). Exploring Crash Injury Severity on Urban Motorways by Applying Finite Mixture Models. Mobil TUM Conference, 13-14 June 2018, Munich, Germany.
- c43. Kourtis E.-M, Ziakopoulos A., **Theofilatos A.**, Yannis G. (2020). Modelling the economic impacts of road crashes in Greece. TRA Conference, 27-30 April 2020, Helsinki, Finland.
- c42. Yannis G., Mavromatis S., Folla K., **Theofilatos A.**, Laiou A., Zammataro S., Gonzalez C., Welsh R., Talbot R., Fernandez E., Sogodel V., Wismans J., Kluppels L., Carnis L., Mignot D. (2020). Identification of Road Safety Risk Factors in Africa. TRA Conference, 27-30 April 2020, Helsinki, Finland.
- c41. Stefatou A., Ziakopoulos A., **Theofilatos A.**, Yannis G. (2019). Greek driver attitudes towards aggressive driving. ICTR conference, 23-25 October 2019, Athens, Greece.
- c40. **Theofilatos A.**, Folla K., Laiou A., Mavromatis S., Yannis G. (2019). Identifying infrastructure risk factors in Africa. World Road Safety Conference (WCTR), 26-31 May 2019, Mumbai, India.
- c39. **Theofilatos A.**, Chen C., Antoniou C (2019). Comparing Machine Learning and Deep Learning Methods for real-time crash prediction. Transportation Research Board, Annual Meeting, 13-17 January 2019, Washington DC., US.
- c38. Vachaviolos D., **Theofilatos A.**, Yannis G. (2018). Critical behavioural and road safety factors of European drivers. 7th Road Safety Conference, 11-12 October 2018, Larissa, Greece.
- c37. Yannis G., Papadimitriou E., **Theofilatos A.**, Ziakopoulos A., Thomas P., Filtness A. (2018). Overview of the SafetyCube project: Towards a European Road Safety Decision Support System. 7th Road Safety Conference, 11-12 October 2018, Larissa, Greece.
- c36. **Theofilatos A.**, Yannis G., Kopelias P., Papadimitriou F. (2018). Exploration of real-time traffic and weather characteristics on crash likelihood of Powered-Two Wheelers in Greece. 7th Road Safety Conference, 11-12 October 2018, Larissa, Greece.
- c35. **Theofilatos A.** (2018). Utilizing real-time traffic and weather data to explore crash frequency on urban motorways: A cusp catastrophe approach. Mobil TUM Conference, 13-14 June 2018, Munich, Germany.
- c34. Ziakopoulos A., **Theofilatos A.**, Yannis G., Margaritis D., Thomas P., Morris A., Brown L., Robibaro M., Usami, D. S., Phan, V. (2018). A preliminary analysis of in-depth accident data for powered two-wheelers and bicycles in Europe. IRCOBI Conference, 12-14 September 2018, Athens, Greece.
- c33. **Theofilatos A.**, Yannis G., Ziakopoulos A. (2018). Combining data mining techniques to investigate crash severity in urban motorways. ESAR 2018, 18-19 April 2018, Hannover, Germany.

- c32. Yannis G., Papadimitriou E., **Theofilatos A.**, Thomas P., Filtness A., Martensen H., Van den Berghe W., Diependaele K., Elvik R., Machata K., Kaiser S., Aigner-Breuss E., Weijermars W., Hermitte T., Thomson R. (2018). SafetyCube-the European Road Safety Decision Support System. Transportation Research Arena, TRA, 16-19 April 2018, Vienna, Austria.
- c31. Papadimitriou E., Bauer R., Daniels S., Elvik R., Ziakopoulos A., **Theofilatos A.**, Yannis G. (2018). Safety effects and cost-effectiveness of infrastructure road safety measures. Transportation Research Arena, TRA, 16-19 April 2018, Vienna, Austria.
- c30. Ziakopoulos A., Botteghi G., Macaluso G., **Theofilatos A.**, Papadimitriou E., Yannis G., Diamandouros K., Arampidou K. (2018). Can light engineering measures make a difference? An overview of the effect of delineation and signage on road safety. Transportation Research Arena, TRA, 16-19 April 2018, Vienna, Austria.
- c29. Kaiser S., Aigner-Breuss E., Martensen H., Talbot R., **Theofilatos A.** (2018). Road user related risks and measures – evidence based decision support for road safety planning. Transportation Research Arena, TRA, 16-19 April 2018, Vienna, Austria.
- c28. Chand S., **Theofilatos A.**, Dixit V. (2018). A novel application of catastrophe and fractal theories for crash and incident modeling. Transportation Research Board, Annual Meeting, 7-11 January, 2018, Washington DC., US.
- c27. **Theofilatos A.**, Nieuwkamp R., Ziakopoulos A., Papadimitriou E., Yannis G. (2017). Effectiveness of intelligent speed adaptation, collision warning and alcolock systems on driving behaviour and safety. “Smart Cities and Mobility as a Service” International Conference, 7-8 December, 2017, Patras, Greece.
- c26. Thomas P., Breen J., Yannis G., Laiou A., Folla K., **Theofilatos A.** (2017). Review of Advanced Driver Assistance Systems. “Smart Cities and Mobility as a Service” International Conference, 7-8 December, 2017, Patras, Greece.
- c25. Souris C., **Theofilatos A.**, Yannis G. (2017). Attitudes of Greek drivers towards autonomous vehicles. ICTR 2017, 27-29 September, Thessaloniki, Greece.
- c24. Thomas P., Filtness A., Yannis G., Papadimitriou E., **Theofilatos A.**, Martensen H., Diapendaele K. (2017). Overview of the European Road Safety Decision Support System. ICTR 2017, 27-29 September, Thessaloniki, Greece.
- c23. Ziakopoulos A., **Theofilatos A.**, Papadimitriou E., Yannis G., Aigner-Breuss E., Kaiser S. (2017). An overview of risk factors related to driver distraction: Reviews and meta-analyses. RSS 2017, 17-19 October 2017, The Hague, Netherlands.
- c22. Laiou A., **Theofilatos A.**, Yannis G., Meesmann U., Torfs K., Trotta M. (2017). Road users' safety attitudes towards speeding. RSS 2017, 17-19 October 2017, The Hague, Netherlands.
- c21. Ziakopoulos A., **Theofilatos A.**, Papadimitriou E., Yannis G. (2017). Driver distraction without presence of secondary tasks: Inattention, cognitive overload and factors outside the vehicle – a review. RSS 2017, 17-19 October 2017, The Hague, Netherlands.
- c20. Papadimitriou E., Filtness A., **Theofilatos A.**, Ziakopoulos A., Yannis G. (2017). Comparative assessment and ranking of infrastructure related crash risk factors. RSS 2017, 17-19 October 2017, The Hague, Netherlands.
- c19. **Theofilatos A.**, Tselentis D., Yannis G., Konstantinopoulos M. (2017). Willingness-to-Pay for Usage-Based Motor Insurance. Transportation Research Board, Annual Meeting, 8-12 January, 2017, Washington DC., US.

- c18. **Theofilatos A.**, Yannis G., Vlahogianni E., Golias J. (2017). Stochastic cusp catastrophe models with traffic and weather data for crash severity analysis on urban arterials. Transportation Research Board, Annual Meeting, 8-12 January, 2017, Washington DC., US.
- c17. Papadimitriou E., Yannis G., **Theofilatos A.**, Thomas P., Martensen H., Machata K., Elvik R., Shingo Usami D. (2016). Development of a road safety Decision Support System for road infrastructure. 1st European Road Infrastructure Congress, 18-20 October 2016, Leeds, United Kingdom.
- c16. Yuan Q., **Theofilatos A.**, Xu M., Li Y. (2016). Characteristics and Injury Severity of Side Crashes at Intersection. Proceedings of the 7th International Conference on Green Intelligent Transportation System and Safety GITSS2016, Nanjing, China, July 2016.
- c15. Yuan Q., **Theofilatos A.**, Wang Y., Wu S., Liu Y. (2016). Characteristics Analysis and Design Discussion on New Human Interface of Electric Vehicle. Proceedings of the 16th International Conference on Man-Machine-Environment System Engineering, Xi'an, China, October 2016.
- c14. Yannis G., Thomas P., Martensen H., Papadimitriou E., **Theofilatos A.** (2016). A common methodology for a European-wide Road Safety Decision Support System. Proceedings of the 7th International Conference ESAR "Expert Symposium on Accident Research", June 2016, Hannover, Germany,
- c13. Yannis G., **Theofilatos A.**, Pispiringos G. (2016). Investigation of road accident severity per vehicle type. World Conference on Transport Research, WCTR 10-15 July 2016, Shanghai, China.
- c12. **Theofilatos, A.**, Yannis, G., Kopelias, P., Papadimitriou, F. (2016). Predicting road accidents: a rare-events modeling approach. Transportation Research Procedia 14, pp. 3399-3405. Transportation Research Arena, TRA, 17-21 April 2016, Warsaw, Poland.
- c11. Laiou A., **Theofilatos A.**, Mavromatis S., Yannis G., Azemsha S. (2016). An exploration of road safety parameters in Belarus and the European Union. Transportation Research Arena, TRA, 17-21 April 2016, Warsaw, Poland.
- c10. Yannis G., Panagolia C., **Theofilatos A.** (2015). A review of the impact of traffic volume on road accidents. Proceedings of the 6th Pan-hellenic Road Safety Conference, Hellenic Institute of Transportation Engineers, National Technical University of Athens, 12-13 March, 2015, Athens, Greece.
- c9. Yannis G., Pavlou D., **Theofilatos A.**, Arvaniti D. (2015). Comparative analysis of factors affecting driving under the influence of alcohol of car drivers and motorcyclists. Proceedings of the 6th Pan-hellenic Road Safety Conference, Hellenic Institute of Transportation Engineers, National Technical University of Athens, 12-13 March, 2015, Athens, Greece.
- c8. Yannis G., **Theofilatos A.**, Marinou, P. (2014). Attitudes of Greek Drivers towards Mobile Phone Use while Driving. Transport Research Arena, TRA, 14-17 April 2014, Paris, France.
- c7. Papadimitriou E., **Theofilatos A.**, Yannis G., Furian G., Brandstaetter C., Britschgi V., Drapela E., Sardi G.M., Freeman R. (2013). Attitudes and Perceptions of European Drivers and Other Road Users towards Road Safety. Proceedings of the 6th International Congress on Transport Research in Greece. 17-18 October 2013, Thessaloniki, Greece.
- c6. Papadimitriou, E., **Theofilatos, A.**, Yannis, G., Furian, G., Brandstaetter, C., Britschgi, V., Drapela, E., Sardi, G.M., Freeman, R. (2013). Motivations, travel

- habits, attitudes and behaviour of European Pedestrians. WCTR, 13-17 July 2013, Rio de Janeiro.
- c5. Papadimitriou E., **Theofilatos A.**, Yannis G., Furian G., Brandstätter C., Britschgi V., Drápela E., Freeman R. (2012). The attitudes and behaviour of European pedestrians. Proceedings of the 25th ICTCT Workshop "Road safety in a globalised and more sustainable world - current issues and future challenges", Belgium, November 2012.
 - c4. Papadimitriou E., **Theofilatos A.**, Yannis G., J. Cestac, Sami Kraïem, Cécile Barbier. (2012). Riding Motorcycle while Impaired. 5th Pan-Hellenic road safety conference, 25-26 October 2012, Volos, Greece.
 - c3. **Theofilatos A.**, Efthymiou. D. (2012). Investigation of pedestrians' accident patterns in Attica. TRA, 23-26 April 2012, Athens, Greece.
 - c2. Yannis G., Papadimitriou E., **Theofilatos A.**, Sardi G.M., Freeman R. (2012). Road safety attitudes and perceptions of pedestrians in Europe. TRA, 23-26 April 2012, Athens, Greece.
 - c1. Yannis G., Papadimitriou E., **Theofilatos A.** (2010). Pedestrian gap acceptance for mid-block street crossing. WCTR, 11-15 July 2010, Lisbon, Portugal.

Conference Papers-with Abstract Review

- a10. Kunwar M., Katrakazas C., **Theofilatos A.**, Antoniou C. (2019). Factors Affecting the Shift to Autonomous Vehicles: A Safety Perspective Survey in Munich. MobilTUM Conference, 11-12 September 2019, Munich, Germany.
- a9. **Theofilatos A.**, Yannis G., Tselentis D., Papadimitriou E., Yuan Q. (2018). Exploring weather effects on Powered-Two-Wheeler safety on urban arterials in Athens. 7th Symposium of the European Association for Research in Transportation - hEART2018 Athens, Greece, 5-7 September 2018.
- a8. Ziakopoulos A., Papadimitriou E., **Theofilatos A.**, Yannis G. (2018). Cost-Effectiveness Evaluation of Selected Road Safety Measures. 7th Symposium of the European Association for Research in Transportation - hEART2018 Athens, Greece, 5-7 September 2018.
- a7. **Theofilatos A.**, Yannis G. (2018). Ranking the importance of real-time traffic and weather variables when examining crash injury severity. 12th Meeting of Multiple Criteria Decision Making, Piraeus, Greece, 15-17 February 2018.
- a6. **Theofilatos A.**, Yannis G., Ziakopoulos A. (2018). Modeling the impact of traffic states on crash injury severity in urban motorways. 12th Meeting of Multiple Criteria Decision Making, Piraeus, Greece, 15-17 February 2018.
- a5. Martensen H., Schoeters A., van den Berghe W., Wijnen W., Weijermars W., Carnis L., **Theofilatos A.**, Yannis G. , Papadimitriou E., Reed S., Filtess A., Thomas P., Thomson R., Elvik R. (2017). Economic Efficiency Evaluation (E3) of Road Safety Measures – Results from the SafetyCube project. IRTAD Conference, 10-12 October 2017, Marakesh, Marocco.
- a4. Ziakopoulos A., **Theofilatos A.**, Papadimitriou E., Yannis G. (2017). An assessment of the effectiveness of formal tools to address road network deficiencies. IRTAD Conference, 10-12 October 2017, Marakesh, Marocco.
- a3. Yannis G., Papadimitriou E., **Theofilatos A.**, Thomas P., Filtess A., Martensen H., Van den Berghe W., Diependaele K., Elvik R., Machata K., Kaiser S., Aigner-Breuss E., Weijermars W., Hermitte T., Thomson R. (2017). SafetyCube - the European Road Safety Decision Support System. IRTAD Conference, 10-12 October 2017, Marakesh, Marocco.

- a2. Pavlou D., **Theofilatos A.**, Papadimitriou E., Yannis G., Papageorgiou S.G. (2016). Exploration of accident probability of drivers with brain pathologies. Proceedings of the 12th World Conference on Injury Prevention and Safety Promotion, Tampere, Finland, 18-21 September 2016.
- a1. **Theofilatos A.**, Yannis G. (2016). Exploring the difference of traffic parameters by severity level and accident type in urban areas. Proceedings of the 12th World Conference on Injury Prevention and Safety Promotion, Tampere, Finland, 18-21 September 2016.

Selected Presentations

- p11. **Comparing Machine Learning and Deep Learning Methods for Real-time Crash Prediction.** (Conference paper). 98th TRB Annual Meeting, Washington, D.C., 13-17 January, 2019.
- p10. **Safety effects of infrastructure road safety measures.** (Conference paper). Transport Research Arena, TRA, Vienna, Austria, 16-19 April 2018.
- p9. **Ranking the importance of real-time traffic and weather variables when examining crash injury severity.** (Conference paper). 12th Meeting of Multiple Criteria Decision Making, Piraeus, Greece, 15-17 February 2018.
- p8. **Modelling the impact of traffic states on crash injury severity in urban motorways.** (Conference paper). 12th Meeting of Multiple Criteria Decision Making, Piraeus, Greece, 15-17 February 2018.
- p7. **Global Road Safety Comparisons: Macroscopic Analysis of International Safety Data.** The 5th International Symposium on Transportation Safety, 25-26 September 2017, Tongji University, China.
- p6. **Predicting road accidents with real-time data-WeatherSafe.** NRSO Workshop in the Framework of the Fourth United Nations Global Road Safety Week. NTUA Zografou Campus, 15-May 2017, Athens, Greece.
- p5. **Roadside and Median Deficiencies within the SafetyCube Road Safety Decision Support System.** (Roadside Design Safety Committee meeting presentation). Transportation Research Board, Annual Meeting, 8-12 January, 2017, Washington DC., US.
- p4. **Exploration of accident probability of drivers with brain pathologies.** (Conference paper). Proceedings of the 12th World Conference on Injury Prevention and Safety Promotion, Tampere, Finland, 18-21 September 2016.
- p3. **An exploration of road safety parameters in Belarus and the European Union.** (Conference Paper). Transportation Research Arena, TRA, Warsaw, Poland, 17-21 April 2016.
- p2. **Attitudes of Greek Drivers towards Mobile Phone Use while Driving.** (Conference Paper). Transport Research Arena, TRA, Paris, France, 14-17 April 2014.
- p1. **Attitudes and Perceptions of European Drivers and Other Road Users towards Road Safety.** (Conference Paper). Proceedings of the 6th International Congress on Transport Research in Greece. Thessaloniki, 17-18 October 2013.

Scientific committees

- **Standing Committee on Alcohol, Other Drugs, and Transportation** as a Young Member. Transportation Research Board, TRB, 2018-2024
- **MobilTUM2022** Conference, 26-27 October 2022, Singapore
- **ICTR2021** Conference, September 2nd - 3rd 2021, Rhodes, Greece
- **UTSG 2021** Chairing Road Safety session, (online), July 5-6 2021

- **hEART2020** Conference, 1-3 September 2020, Lyon, France
- **MobilTUM2020** Conference, 26-27 October 2020, Singapore
- **MobilTUM2019** Conference, 11-12 September 2019, Munich, Germany
- **hEART2018** Conference, 5-7 September 2018, Athens, Greece

Organizing committees

- **hEART2018** Conference, Athens, Greece, 5-7 September 2018
- **MobilTUM2019** Conference, Munich, Germany, 11- 12 September 2019

Affiliations

- Fellow of the Higher Education Academy (UK)
- Fellow statistician in the Royal Statistical Society (UK)
- Member of the Transport Planning Society (UK)
- Member of the Technical Chamber of Greece
- Member of the Greek Society of Civil Engineers
- Member of Greek Society of Transportation Engineers

Scholarships/Awards

- Part of the [WorldsTop2PercentScientists list](#) produced by Elsevier and Stanford University. This list contains the **top 2% of researchers in the world** based on citation metrics for the year 2020.
- **The 42th IATSS Award, “The Best Paper Award” category. International Association of Traffic and Safety Sciences (IATSS).** For the paper: A meta-analysis of the impacts of operating in-vehicle information systems on road safety", published in IATSS Research (2019).
- **Seal of Excellence Marie Curie Individual Fellowship (2018)**, for the postdoctoral research proposal “*SPARTAN-Safety analysis and ProActive Real-time Traffic management considering AutoNomous vehicles*” which scored above 85%.
- **Certificate in Outstanding Contribution in Reviewing.** Accident Analysis and Prevention, Transportation Research Part F, Safety Science, Computers in Human Behaviour. Elsevier Reviewing Recognition.
- **PhD Studentship (2012-2015)**, Department of Transportation Planning and Engineering, National Technical University of Athens, January 2012 – January 2015
- **Thomaideio Award (2018)** (NTUA) for the paper “Examining injury severity of moped and motorcycle occupants with real-time traffic and weather data”, published in 2017 in Journal of Transportation Engineering, Part A: Systems journal.
- **Thomaideio Award (2017)** (NTUA) for the paper “Investigation of powered 2-wheeler accident involvement in urban arterials by considering real-time traffic and weather data”, published in 2017 in Traffic Injury Prevention journal.
- **Thomaideio Award (2015)** (NTUA) for the paper “A review of the effect of traffic and weather characteristics on road safety”, published in 2014 in Accident Analysis and Prevention journal.
- **Thomaideio Award (2014)** (NTUA) for the paper “Pedestrian Gap Acceptance for Mid-Block Street Crossing” published in 2013 in Transportation Planning and Technology journal.

Student Mentoring

PhD Student Supervision

- phd3. Singh Sodha, Kuldeep. **Influence of pedestrians' perception about AVs on safety and efficiency at intersections and mid blocks.** (2021 –) (External Supervisor, Loughborough University)
- phd2. Kalantzi, Maria. **Developing countermeasures for work-related road safety on the SRN.** (2020 –) (External Supervisor, Imperial College London)

PhD Advisory Board

- adv1. Petraki, Evgenia. **Big data and new forms of urban sustainable mobility.** (2021 – Present)

Completed PhD Theses

- phd1. Man, Cheuk. **Developing Transferable Real-time Crash Prediction Models for Highly Imbalanced Data.** (2019 – 2022)

BSc and MSc Student Supervision

- ug6. Montgomery, Isabella. **Public perceptions towards Urban Air Mobility (UAM) services.** (2020 – 2021)
- ug5. Rana, Nischal. **Investigation of the link between transport and well-being.** (2020 – 2021).
- ug4. Mativat, Jonathan. **Impact of social distancing on transport mode choice.** (2020 – 2021)
- ug3. Tsekova, Yoana. **Linking public transport usage and well-being.** (2019 – 2020)
- ug2. Kawai, David Robert. **User adoption of new urban air transport services.** (2019 – 2020)
- ug1. Bywater, Andrew. **User adoption of new urban air transport services.** (2019 – 2020)

Computer Skills

- **Statistical Analysis:** SPSS, R-studio, WinBUGS, JASP
- **Programming:** R-studio, Python
- **Traffic modeling:** ARCADY, PICADY, Junctions9
- **Big data:** SparkR
- **GIS:** QGIS
- **Design:** Archicad, Autocad 2D
- **Transport Safety:** Highway Safety Manual
- **Game theory:** Gambit
- **Operation Systems:** Microsoft Windows
- **General:** Microsoft Office, Internet, Total Commander

Language Skills

- **Greek:** Native Language
- **English:** Fluent – Certificate of Proficiency in English, University of Cambridge and University of Michigan (2005)
- **German:** Good – B2 level, Goethe - Zertifikat B2 Deutsch (2009)

Other Seminars and Lifelong Education

- **Deep Learning in R** certificate (Udemy), October 2021.
- Courses on **ARCADY/PICADY** organized by TRL, Crowthorne, UK, 7-8 February 2018.
- **Applied Time Series Analysis and Forecasting with R** certificate (Udemy), February 2019.
- **Linear Mixed-Effects Models with R** certificate (Udemy), January 2019.
- **R-programming A-Z: R for data science with real exercises** certificate (Udemy), June 2018.
- **R-programming: Advanced Analytics for Data Science** certificate (Udemy), December 2018.
- **Python programming** certificate (Udemy), February 2018.
- **Introduction to Time Series Analysis and Forecasting in R** certificate (Udemy). March 2018.
- **Machine Learning** certificate (Udemy), May 2018.
- **Core Spatial Data Analysis** certificate (Udemy), April 2018.
- Webinar organized by Crash Modification Factors Clearinghouse: **Real World Safety: The benefits of using CMFs to Predict and Prioritize**. December 2015.
- **Data Science Toolbox**. (Coursera), offering by John Hopkins University. February 2015.
- **Bayesian Modelling for Cognitive Science: A WinBUGS workshop**. University of Amsterdam, 12–16 August 2013.

Other scientific activities

Guest editor in scientific journals

- **Guest editor on the Special Issue “Challenges and Strategies for Sustainable Transportation and Traffic Safety”**. *Sustainability Journal*. 2022.
https://www.mdpi.com/journal/sustainability/special_issues/challenges_strategies_sustainable_transportation_traffic_safety
- **Guest editor on the Special Issue “Sustainable and Safe Two-Wheel Mobility”**. *Sustainability Journal*. 2022.
https://www.mdpi.com/journal/sustainability/special_issues/Two-Wheel

Member of editorial board in scientific journals

International Journal of Interdisciplinary Engineering and Applied Sciences

Reviewer of papers to be published in scientific journals

- Accident Analysis and Prevention
- Analytic Methods in Accident Research
- Transportation Research Part A
- Transportation Research Part C
- Transportation Research Part F
- Transportation Research Part D
- IEEE Transactions on Intelligent Transportation Systems.
- Transport Policy
- Journal of Choice Modelling
- ASCE journal of transportation engineering part A: systems
- Journal of Transport and Health

- Traffic Injury Prevention
- Journal of Advanced Transportation
- Safety Science
- Journal of Safety Research
- Journal of Transportation Safety and Security
- Travel Behaviour and Society
- IATSS Research
- Research in Transportation Economics
- Journal of Traffic and Transportation Engineering (English Edition)
- Transportation Letters
- Transportmetrica A: Transport Science
- Journal of Intelligent Transport Systems
- IET Intelligent Transport Systems
- PLOS ONE
- Journal of Choice Modelling
- Advances in Civil Engineering
- International Journal of Sustainable Transportation
- Urban Planning and Transport Research
- Royal Society Open Science
- Advances in Transportation Studies
- Experts Systems in Applications
- Mathematical Problems in Engineering
- ICE Transport
- Applied Sciences
- International Journal of Injury Control and Safety Promotion
- Transport
- SAGE Open Journal
- Safety
- Case Studies on Transport Policy
- Soft Computing Journal
- International Journal of Environmental Research and Public Health
- Computers in Human Behaviour
- European Transport Research Review
- Environmental Health Perspectives
- The Open Transportation Journal
- Sustainability
- BMC Emergency Medicine
- BMJ Open
- Advances in Mechanical Engineering
- Soft Computing
- Allied Academic Journals
- Sustainable Cities and Society
- Sultan Qaboos University Medical Journal
- PeerJ
- Tropical Medicine and International Health
- Cumhuriyet Science Journal
- Open Journal of Safety Science and Technology
- American Meteorological Society
- International Journal of Decision Support Systems
- Science of the Total Environment

-Sigma Journal of Engineering and Natural Sciences

Reviewer of papers to be published in scientific conferences

-TRB, Committees ANB20, ANB50

-TRA 2018

-ASCE ICTD Conference 2018

-hEART2017

-EWGT 2017

-IEEE 2016

Extracurricular activities

Taekwondo (1st dan black belt)

Piano

Reading philosophy