

CURRICULUM VITAE

PERSONAL INFORMATION

Full name: ANASTASIA SPILIOPOULOU
Nationality: Greek
Date of birth: 16/11/1983
Place of birth: Patras
Address: Dept. of Production Engineering and Management
Technical University of Crete
GR-73100, Chania, Greece
e- mail: natasa@dssl.tuc.gr
Telephone: +306973621257

EDUCATION

2011–2015: **Technical University of Crete, Chania, Greece**
Department of Production Engineering and Management
Doctor of Philosophy
Ph.D. thesis: Freeway traffic flow modeling and control with emphasis on congested off-ramp areas

2007–2009: **Technical University of Crete, Chania, Greece**
Department of Production Engineering and Management
MSc in Engineering Management
MSc Thesis: *"Queue management techniques for metered freeway on-ramps"*

July–Aug. 2008: **University of California, Berkeley, CA, USA**
Institute of Transportation Studies
Visiting Student

Feb.–July 2004: **Czech Technical University, Prague, Czech Republic**
Department of Mechanical Engineering
Visiting Student

2001–2007: **Technical University of Crete, Chania, Greece**
Department of Production Engineering and Management
Diploma in Production Engineering and Management
Diploma Thesis: *"Real-time toll plaza management for throughput maximization"*
Diploma Degree: 7.8

LANGUAGES

Greek: Mother tongue
English: Fluently (CPE, Cambridge Proficiency in English)

COMPUTER SKILLS

Softwares: MS Office, Matlab, METANET, AIMSUN, VISSIM, Pro/Engineer, AutoCad
Programming languages: C/C++, Matlab

SCHOLARSHIPS - AWARDS

2014:	TRAVISIONS student competition in the area of sustainable surface transport, Paris 5 th out of 20 participants for the article: Spiliopoulou, A., Kontorinaki, M., Papamichail, I., Papageorgiou, M.: Real-time route diversion control at congested motorway off-ramp areas
2012:	Technical Chamber of Greece Award for excellence for the Greek graduate students of the technical universities
2010–2013:	Greek Ministry of Education & the European Social Fund Post-graduate research scholarship HERAKLEITUS II (duration: 3 years)
2010:	YEAR 2010 competition for early stage researchers in the area of surface transport, Brussels One of the top 8 finalists (out of 63 participants) for the article: Spiliopoulou, A., Papamichail, I., Papageorgiou, M.: Queue management techniques for metered freeway on-ramps.
2008:	Technical University of Crete Scholarship for visiting foreign universities and institutions University of California, Berkeley, CA, USA (duration: 2 months)
2005–2006:	State Scholarships Foundation (IKY) Award for excellence in undergraduate studies
2004:	State Scholarships Foundation (IKY) Scholarship for participation in the SOCRATES-ERASMUS program Czech Technical University, Prague, Czech Republic (duration: 6 months)

EXPERIENCE

2009–2014:	Technical University of Crete, Chania, Greece Dept. of Production Engineering and Management Teaching Assistant for the course “Dynamic Programming”
2011, 2012:	Technical University of Crete, Chania, Greece Dept. of Production Engineering and Management Teaching Assistant for the course “Project and Production Management and Scheduling”
since 2006:	Technical University of Crete, Chania, Greece Dept. of Production Engineering and Management Dynamic Systems and Simulation Laboratory Research Associate
July–August 2006:	Public Power Corporation S.A. – Chania, Greece Student Associate

PARTICIPATION IN RESEARCH PROGRAMS

- **ARCHIMEDES III:** Development of a software system for automatic selection of macroscopic traffic models for urban and interurban motorways.
- **TRAMAN21:** Traffic management for the 21st century.
- **HERACLITUS II :** Advanced methods of traffic flow modelling and control for freeway networks.
- **NEARCTIS:** A Network of Excellence for Advanced Road Cooperative Traffic Management in the Information Society.
- **COOPERS:** Co-operative Networks for Intelligent Road Safety.
- **EURAMP:** Ramp Metering for Motorway Network.

SCIENTIFIC PRESENTATIONS

- A Calibration tool for macroscopic traffic flow models. *3rd International Symposium & 25th National Conference on Operational Research*, Volos, Greece, June 26–28, 2014.
- Macroscopic traffic flow model calibration using different optimization algorithms. *4th International symposium of transport simulation*, Ajaccio, Corsica, France, June 1–4, 2014.
- Real-time route diversion control at congested off-ramp areas – Part II: Route guidance versus off-ramp closure. *16th Meeting of the EURO Working Group on Transportation*, Porto, Portugal, 4–6 September 2013.
- Queue management techniques for metered freeway on-ramps. *13th Meeting of the EURO Working Group on Transportation*, Padua, Italy, 23–25 September 2009.
- Real-time merging control with applications to toll plaza and work zone management. *California Partners for Advanced Transit and Highways (PATH)*, Berkeley, California, USA, 7 August, 2008.
- Toll plaza merging traffic control for throughput maximization. *10th ASCE Intern. Conference on Application of Advanced Technologies in Transportation (AATT 2008)*, Athens, Greece, 28–30 May, 2008.

BOOK PUBLICATIONS

- B1. Papageorgiou, M., Papamichail, I., **Spiliopoulou, A.D.**, & Lentzakis, A.F. (2009)
Real-time merging traffic control with applications to toll plaza and work zone management.
In *Modélisation du Trafic - Actes du Groupe de Travail 2007*, Actes INRETS No. 123, pp. 101–127.

JOURNAL PAPERS PUBLICATIONS

- J1. **Spiliopoulou, A.**, Papamichail, I., Papageorgiou, M., Tyrinopoulos, Y., Chrysoulakis, J. (2015)
Macroscopic traffic flow model calibration using different optimization algorithms.
Operational Research: An International Journal, Accepted.
- J2. Kontorinaki, M., **Spiliopoulou, A.**, Papamichail, I., Papageorgiou, M., Tyrinopoulos, Y., Chrysoulakis, J. (2014)
Overview of nonlinear programming methods suitable for calibration of traffic flow models.
Operational Research: An International Journal, Vol. 15 (3), pp 327–336.
- J3. Tympakianaki, A., **Spiliopoulou, A.**, Kouvelas, A., Papamichail, I., Papageorgiou, M., Wang, Y. (2014)
Real-time merging traffic control for throughput maximization at motorway work zones
Transportation Research Part C, Vol. 44, pp. 242–252.
- J4. **Spiliopoulou, A.**, Kontorinaki, M., Papageorgiou, M., & Kopelias, P. (2014)
Macroscopic traffic flow model validation at congested freeway off-ramp areas
Transportation Research Part C, Vol. 41, pp. 18–29.
- J5. **Spiliopoulou, A.D.**, Manolis, D., Papamichail, I., & Papageorgiou, M. (2010)
Queue management techniques for metered freeway on-ramps
Transportation Research Record, Vol. 2178, pp. 40–48.
- J6. **Spiliopoulou, A.D.**, Papamichail, I., & Papageorgiou, M. (2010)
Toll plaza merging traffic control for throughput maximization
Journal of Transportation Engineering - ASCE, Vol. 136, pp. 67–76.
- J7. Papageorgiou, M., Papamichail, I., **Spiliopoulou, A.D.**, & Lentzakis, A.F. (2008)
Real-time merging control with applications to toll plaza and work zone management
Transportation Research Part C, Vol. 16, pp. 535–553.

CONFERENCE PAPERS PUBLICATIONS

- C1. **Spiliopoulou, A.**, Papamichail, I., Papageorgiou, M., Tyrinopoulos, Y., Chrysoulakis, J. (2014)
Calibration of two macroscopic traffic flow models using a genetic algorithm
Proc. of the 11th International Congress on Advances in Civil Engineering, Istanbul, Turkey, October 21–25.
- C2. **Spiliopoulou, A.**, Papamichail, I., Papageorgiou, & Chrysoulakis, J. (2014)
A Calibration tool for macroscopic traffic flow models
Proc. of the 3rd International Symposium & 25th National Conference on Operational Research, Volos, Greece, June 26–28, pp. 215–225.

- C3. **Spiliopoulou, A.**, Papamichail, I., Papageorgiou, M., Tyrinopoulos, Y., & Chrysoulakis, J. (2014)
Macroscopic traffic flow model calibration using different optimization algorithms
Proc. Of the 4th International symposium of transport simulation, Ajaccio, Corsica, France, June 1–4.
- C4. **Spiliopoulou, A.**, Kontorinaki, M., Papageorgiou, M. & Kopelias, P. (2013)
Συγκριτική αξιολόγηση μακροσκοπικών μοντέλων κυκλοφορίας σε περιοχές ραμπών εξόδου αυτοκινητοδρόμων
(Comparative evaluation of macroscopic traffic flow models in freeway off-ramp areas)
6^ο Συνέδριο για την Έρευνα στις Μεταφορές στην Ελλάδα (6th Congress on Transportation Research in Greece),
Thessaloniki, Greece, October 17–18.
- C5. **Spiliopoulou, A.**, Kontorinaki, M., Papamichail, I., & Papageorgiou, M. (2013)
Real-time route diversion control at congested motorway off-ramp areas – Part I: User-optimum route guidance
Proc. of the 16th International IEEE Annual Conference on Intelligent Transportation Systems, The Hague, The Netherlands, October 6–9.
- C6. **Spiliopoulou, A.**, Kontorinaki, M., Papamichail, I., & Papageorgiou, M. (2013)
Real-time route diversion control at congested off-ramp areas - Part II: Route guidance versus off-ramp closure.
Procedia - Social and Behavioral Sciences 111, pp. 1002-1111, EWGT2013 – 16th Meeting of the EURO Working Group on Transportation, Porto, Portugal, September 4-6.
- C7. Tympaniakaki, A., **Spiliopoulou, A.D.**, Kouvelas, A., & Papageorgiou, M. (2012)
Real-time merging traffic control for throughput maximization at motorway work zones.
Procedia - Social and Behavioral Sciences 48, pp. 1545-1556, Transport Research Arena 2012, Athens, Greece, April 23-26.
- C8. **Spiliopoulou, A.**, Papageorgiou, M., Kouvelas, A., & Aboudolas, K. (2010)
Application of the TUC signal control strategy to the Kifisias–Attiki Odos network
Proc. of the 5th International Congress on Transport Research, Volos, Greece, September 27–28.
- C9. **Spiliopoulou, A.D.**, Manolis, D., Papamichail, I., & Papageorgiou, M. (2010)
Queue management techniques for metered freeway on-ramps
Proc. of the 89th Transportation Research Board Annual Meeting, Washington, D.C., U.S.A., January 10–14.
- C10. **Spiliopoulou, A.D.**, Papamichail, I., & Papageorgiou, M. (2009)
Queue management techniques for metered freeway on-ramps
Proc. of the 13th EURO Working Group on Transportation Meeting, Padua, Italy, September 23–25.
- C11. **Spiliopoulou, A.D.**, Papamichail, I., & Papageorgiou, M. (2008)
Toll plaza merging traffic control for throughput maximization
Proc. of the 10th International Conference on Applications of Advanced Technologies in Transportation (AATT 2008),
Athens, Greece, May 27–31.
- C12. Lentzakis, A.F., **Spiliopoulou, A.D.**, Papamichail, I., & Papageorgiou, M. (2008)
Real-time work zone management for throughput maximization
Proc. of the 87th Transportation Research Board Annual Meeting, Washington, D.C., U.S.A., January 13–17.
- C13. **Spiliopoulou, A.D.**, Papamichail, I., & Papageorgiou, M. (2008)
Real-time toll plaza management for throughput maximization
Proc. of the 87th Transportation Research Board Annual Meeting, Washington, D.C., U.S.A., January 13–17.

OTHER PUBLICATIONS

- R1. **Spiliopoulou, A.**, Papamichail, I., Papageorgiou, M., Tyrinopoulos, Y., & J. Chrysoulakis.
Comparative evaluation. Deliverable 6.1.
Technical Report for the Project SMOOTH, ARCHIMEDES III, Athens, December 2014.
- R2. **Spiliopoulou, A.**, Papamichail, I., Papageorgiou, M., Tyrinopoulos, Y., & J. Chrysoulakis.
Accuracy and reliability investigations. Deliverable 5.1.
Technical Report for the Project SMOOTH, ARCHIMEDES III, Athens, November 2014.
- R3. **Spiliopoulou, A.**, Papamichail, I., Papageorgiou, M., & J. Chrysoulakis.
CALISTO user's manual. Deliverable 4.1.
Technical Report for the Project SMOOTH, ARCHIMEDES III, Athens, July 2014.
- R4. Papamichail, I., Iordanidou, G.R., **Spiliopoulou, A.**, & Papageorgiou, M.
Modelling, configuration and simulation testing for the Main Roads managed freeways pilot project
Final Research Report prepared for Main Roads Western Australia, Perth, Australia, March 2013.
- R5. **Spiliopoulou, A.**, Kouvelas, A., Papageorgiou, M., & Aboudolas, K.
Application of the TUC signal control strategy to the Kifisias–Attiki Odos network
Final Research Report prepared for Attikes Diadromes, Athens, Greece, January 2010.