

Department of Electrical and Computer Engineering

Title: «**Intelligent Transportation Systems**»

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Wednesday, 11th March 2015, 17:00 – 18:00
Room KENTP. A019, Old Campus – University of Cyprus

Abstract:

In the EU alone, road transportation systems account for about 30-35% of the total energy consumption and 60-70% of petroleum fuel consumption, result in over 30,000 fatalities, while congestion causes travellers billions of hours of wasted time and a monetary cost of 1-2% of the Gross Domestic Product every year. Recent advances in electronics, communications, sensing, positioning and information systems have led to the introduction of intelligent transportation systems (ITS), with the potential to revolutionize road transport by increasing the capacity of existing infrastructures.

This presentation will provide an introduction to ITS discussing its main application areas, enabling technologies and benefits. In addition, the state-of-the-art and major challenges in ITS will be summarized with major emphasis on the topics of monitoring, control and security.

Biography:

Stelios Timotheou is a Research Associate at the KIOS Research Center for Intelligent Systems and Networks of the University of Cyprus (UCY). He received a B.Sc. from the Electrical and Computer Engineering (ECE) School of the National Technical University of Athens, and an M.Sc. and Ph.D. from the Electrical and Electronic Engineering Department of Imperial College London. In previous appointments, he was a Visiting Lecturer at the ECE Department of UCY, a Research Associate at the Computer Laboratory of the University of Cambridge and a Visiting Scholar at the Intelligent Transportation Systems Center & Testbed, University of Toronto. His research focuses on the modelling and system-wide solution of problems in complex and uncertain environments that require real-time and close to optimal decisions by developing optimisation, machine learning and computational intelligence techniques. Application areas of his work include intelligent transportation systems, communication systems, disaster management, and neural networks. He is a member of the IEEE and the ACM.