

## Department of Electrical and Computer Engineering

**Title: «Mobility Management and Performance Control in Wireless Networks»**

**Dr. Vasos Vassiliou, Assistant Professor**  
at the Department of Computer Science of the University of Cyprus

**Wednesday, 12<sup>th</sup> March 2014, 17:30 – 18:30**  
**Room KENTP. - A008, Old Campus**  
**University of Cyprus**

### **Abstract:**

Currently we are witnessing an explosive growth in the use of mobile phones, not only for conventional speech communications, but increasingly in remotely accessing data and global networks such as the Internet. As computer and telecommunications technologies advance and converge, the demand of developed societies for prompt and reliable information transfer and exchange vastly increases as well. Wireless communications offer highly effective solutions for instant access to information, especially for mobile users. The momentum toward using a plethora of multimedia forms (voice, video, and data applications) is also creating new realities. To cope with these new realities we have to provide for management solutions for the user mobility and the support of their quality of experience (QoE). Over the last few years there were many efforts to support the applications described above in next generation IP-based mobile wireless networks.

This talk will initially present a line of research that addresses mobility and Quality of Service (QoS) management in mobile wireless networks. We start with the introduction of Mobile IPv6 concepts in Virtual Circuit-based networks (namely: MPLS) and the use of QoS adaptation to cope with changes in such environments and continue with the problem of correctly characterizing Mobile IPv6 handovers, by providing a detailed description of handover latency components. The talk will also present our current activities towards mobility support and performance control in Wireless Sensor Networks.

### **Biography:**

Dr. Vasos Vassiliou is an Assistant Professor at the Department of Computer Science of the University of Cyprus. He completed his undergraduate studies at the Higher Technical Institute (H.N.D in Electrical Engineering, 1993) and the University of South Florida (B.Sc. in Electrical Engineering, 1997) and his postgraduate studies at the Georgia Institute of Technology (M.Sc. in Electrical and Computer Engineering, 1999, Ph.D. in Electrical and Computer Engineering, 2002). Before joining the Department of Computer Science of the University of Cyprus he held positions as a Lecturer (2005-2011) and Visiting Lecturer at the same department (2004-2005) and as an Assistant Professor at the Computer Science Department of Intercollege (2002-2004). His research interests lie in the area of Protocol Design and Performance Control aspects of Networks, and in particular in Mobility Management, QoS Adaptation and Control, Next Generation Network Architectures, and Resource Allocation and Management Techniques.