University of Cyprus
Department of Computer Science

You are cordially invited to the Colloquium on:

Incremental, Distributed, and Concurrent Service Coordination for Reliable and Deterministic Systems-of-Systems

Dr. Ala' Khalifeh
German Jordanian University, German Jordanian University

Tuesday, September 21, 2021
18:00-19:00 EET

Room 148, Faculty of Pure and Applied Sciences (FST-01), 1 University Avenue, 2109 Nicosia, Cyprus (directions)

Abstract:

Systems-of-systems (SoS) are gaining increasing attention for the realization of safety-relevant applications with reliability and real-time requirements, by coordinating autonomous constituent systems from different application areas. For a given application that is initiated at a constituent system, the provision and use of services between constituent systems must be coordinated. This involves identifying constituent systems that can provide the services, optimizing the use of the services driven by extra-functional properties, performing admission control for service provision, reserving resources for provided services, and recursively using services from subcontracted constituent systems to realize service provisions. In this talk, new conceptual models with service provisioning for reliable and deterministic SoS applications, as well as distributed algorithms for the discovery, optimized selection, and admission of service provisions are discussed.

Short Bio:

Ala' Khalifeh received the PhD degree in Electrical and Computer Engineering from the University of California, Irvine -USA in 2010. He is currently an Associate Professor in the Communication Engineering department at the German Jordanian University and the department chair. Dr. Khalifeh is the recipient of the Fulbright scholarship (2005-2007) sponsored by the Bureau of Educational and Cultural Affairs of the United States Department of State and the University of California Pedagogical fellowship for his excellent teaching and leadership skills. He has received numerous academic and technical awards such as: The Young AFCEA 40 Under 40 winners. The German Jordanian University award for the industrial relationship Jul 2016 and the German Jordanian University Excellence in Research Award, Sep 2015. His research is in communications technology, signal processing, and networking with particular emphasis on optimal resource allocations for multimedia transmission over wired and wireless networks, VoIP, E-health applications, speech, video and audio signal processing.

Host: Dr. Vasos Vassiliou (vasosv-AT-cs.ucy.ac.cy)