Πανεπιστήμιο Κύπρου
University of Cyprus

School of Engineering
Department of Electrical and Computer Engineering

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Department of Electrical and Computer Engineering

Title: ***« Adaptive Memory Systems for Heterogeneous Memories and Processors »***

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Friday, March 7, 2014, 11:00-12:00 a.m.
Room 148, Building 12 Faculty of Pure and Applied Sciences,
New Campus, University of Cyprus

Abstract:
The memory system continues to be a significant performance bottleneck while at the same time consuming significant power and posing a reliability challenge. With the constraints on bandwidth, power, and energy continuously tightening, adaptivity and heterogeneity can significantly boost overall performance and reduce costs. In this talk I will give an architect's perspective on recent trends, challenges, and opportunities of emerging memory device, packaging, and interface technologies. I will then discuss recent research directions and results that demonstrate how adaptivity offers promising cross-layer solutions.

Short Bio:
Mattan Erez is an Associate Professor at the Department of Electrical and Computer Engineering at the University of Texas at Austin. His research focuses on improving the performance, efficiency, and scalability of computing systems through advances in hardware architecture, software systems, and programming models. The vision is to increase the cooperation across system layers and develop flexible and adaptive mechanisms for proportional resource usage. Mattan received a B.Sc. in Electrical Engineering and a B.A. in Physics from the Technion, Israel Institute of Technology and his M.S and Ph.D. in Electrical Engineering from Stanford University. He is a recipient of a 2013 Presidential Early Career Award in Science and Engineering (PECASE), a 2012 Early Career Research Award from the Department of Energy, and a 2010 NSF CAREER Award.

Note: The colloquium is jointly organized by the Department of Computer Science at the University of Cyprus and the Department of Electrical and Computer Engineering at the University of Cyprus.