



Title **Power Management and Energy Scavenging in Computing**

Speaker Dr. Ali Muhtaroglu

Venue Saeed Al Mufty Auditorium
Faculty of Engineering and Technology
The University of Jordan
Monday, 24/10/2011, 12:45-2:00 pm



Talk Abstract

Contemporary computing requires performance when needed, long battery life, low energy operation, and compact, low cost, light platforms, all at the same time. Good power management is often the determinant for success. Main traditional power management development areas are architectural power/performance features, low power circuits, power electronics or power delivery, and thermal management system design. These areas are reviewed in the first part of the seminar. Next, energy scavenging is introduced as a recently proposed power management field with great potential for development. Available energy sources around a computing platform, and associated scavenging technologies are reviewed. Full system approach is emphasized for effective integration of energy scavengers to practical computing platforms. Recent research output from our group and others are discussed in the last part of the seminar.

About the Speaker

Asst. Prof. Dr. Ali Muhtaroglu completed his B.S. at University of Rochester, M.S. at Cornell University, and Ph.D. at Oregon State University, all degrees in Electrical Engineering. He is the coordinator of Electrical and Electronics Engineering (EEE) undergraduate program, and the M.S. program in Sustainable Environment and Energy Systems (SEES) at Middle East Technical University Northern Cyprus Campus (METU NCC). He is also a member of the Renewable Energy Design and Applications Research (REDAR) group at METU NCC. Prior to joining academia he worked at Intel Corporation R&D in U.S.A for more than 10 years. His experience and research interests include Integrated Circuit (IC) design, renewable energy systems, and low power system architectures. Dr. Muhtaroglu has numerous publications, and a few patents. He has served in the technical program committees for various IEEE sponsored international conferences. He is currently chairing the Technical Program Committee for the 2nd International Conference on Energy Aware Computing to be held in Istanbul between November 30th and December 2nd, 2011. He is a Senior IEEE Member.

Lecture Series Organizers

- Computer Engineering Department, The University of Jordan
- IEEE – Jordan Section