IEEE SSCS Distinguished Lecture
IEEE SSCS/CASS Atlanta Joint Chapter Seminar

Title: Reconfigurable Radio-Frequency Transceivers

Speaker: Professor Hossein Hashemi (Department of Electrical Engineering)
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Abstract: Modern commercial and military wireless systems should support various waveforms and standards under dynamically changing electromagnetic environments. A straightforward Software-Defined Radio (SDR) enables changing the radio parameters, such as carrier frequency, modulation format, and signal bandwidth, in a fixed architecture, through software. A more advanced reconfigurable radio enables changing the architecture of the transceiver and/or the individual building blocks in order to optimize the performance while minimizing the power consumption. Architectural level reconfigurability reduces the Non-Recurring Engineering (NRE) cost associated with the design of a new transceiver tailored to a specific application. Moreover, dynamic adjustment of radio architecture and specifications can be in response to, for instance, varying signal to noise ratio levels, locations and powers of interference and jamming signals, etc. This talk covers several examples of reconfigurable radio-frequency transceivers implemented in CMOS technology.


**Seminar Time:** 1:30PM-3:00PM on November 7th 2013

**Seminar Location:** Technology Square Research Building (TSRB), 1st Floor Auditorium (Rm118), 85 5th Street NW, Atlanta, GA 30308

**Organizer:** Dr. Hua Wang, IEEE SSCS/CASS Atlanta Joint Chapter Chair, Assistant Professor, School of Electrical and Computer Engineering, Georgia Institute of Technology.
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Light refreshments will be served at the seminar.