Design Techniques for LC-Based Circuits: From Oscillators to Wireless Power Delivery Systems

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Analog and RF building blocks are often among the main design bottlenecks of wireless devices and typically dictate the overall performance and power consumption of the system. In this presentation, some of the recent and ongoing work of the System-on-Chip (SoC) Research Group of the University of British Columbia on circuit and system design for wireless communication and biomedical devices will be highlighted. In particular, we will focus on design techniques for LC-based oscillators as well as resonance-based wireless power delivery.

Biography: Shahriar Mirabbasi received the BSc in electrical engineering from Sharif University of Technology in 1990, and his MASc and PhD degrees in electrical and computer engineering from the University of Toronto in 1997 and 2002, respectively. Since August 2002, he has been with the Department of Electrical and Computer Engineering, at the University of British Columbia where he is currently an Associate Professor. His current research interests include analog, mixed-signal, and RF integrated circuit and system design for wireless and wireline communication, data converter, sensor interface, and biomedical applications.

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