



***Electrical Engineering Seminar Series &
Dallas Chapter of IEEE Signal Processing Society Present***

Greener Video Coding and Processing for the Mobile and Desktop Worlds

**Professor Ricardo de Queiroz
University of Brazil, Brazil**

Distinguished Lecturer of IEEE Signal Processing Society

11:00am, Monday, Oct 17, 2011 – ECSS 2.102 (TI Auditorium)

Issues on video transmission to and from mobile devices will be discussed and a few solutions will be presented with particular emphasis to reducing complexity and power consumption of video coding devices and algorithms. We discuss scalable-complexity algorithms for video encoding that try to optimize the encoding in a rate-distortion-complexity sense. The idea is to develop a cognitive coder that makes all decision on its own, i.e. discovers the available bandwidth, available computer power and tolerable distortion, making the appropriate decisions. The application are for not only single video transmission, but also for video servers and farms of transcoders, multiview video and free-viewpoint television.

Ricardo L. de Queiroz received the Ph.D. degree in Electrical Engineering from the University of Texas at Arlington in 1994. He joined Xerox Corp. in 1994, where he was a member of the research staff until 2002. He joined the Universidade de Brasilia in 2003 and became a Full Professor at the Computer Science Department in 2010. Dr. de Queiroz has published over 140 articles in journals and conferences and contributed chapters to books as well. He also holds 46 issued patents. According to Harzing's Publish Or Perish, his work has been cited over 1900 times. He is an elected member of the IEEE Signal Processing Society's Image, Video and Multidimensional Signal Processing (IVMSP) and Multimedia Signal Processing (MMSP) Technical Committees. He is a past editor for the EURASIP Journal on Image and Video Processing, IEEE Signal Processing Letters, IEEE Transactions on Image Processing, and IEEE Transactions on Circuits and Systems for Video Technology. He has been appointed an IEEE Signal Processing Society Distinguished Lecturer for the 2011-2012 term. Dr. de Queiroz has been actively involved with the Rochester Chapter of the IEEE Signal Processing Society, where he served as Chair and organized the Western New York Image Processing Workshop since its inception until 2001. He is now organizing IEEE SPS Chapters in Brazil and in Latin America. He is the General Chair of ISCAS'2011, MMSP'2009, and SBrT'2012. He was also part of the organizing committee of ICIP'2002. His research interests include image and video compression, multirate signal processing, and color imaging. Dr. de Queiroz is a Senior Member of IEEE, a member of the Brazilian Telecommunications Society and of the Brazilian Society of Television Engineers.

For more information on the Dallas Chapter of IEEE Signal Processing Society and directions to UTD, see <http://www.utdallas.edu/~kehtar/ieee-sp>