Announcing the Final Examination of Jeffrey Lambert for the degree of Master of Science

Time & Location: March 28, 2011 at 2:00 PM in HEC 302
Title: A RADAR Interrogator for Resonator Temperature Sensors

In this thesis I explore RADAR and software defined radio (SDR) in the context of resonator sensor interrogation. A RADAR topology is selected based upon preliminary measurements using ordinary laboratory instrumentation and then used for construction of a prototype X-band wireless measurement system using commercial, off-the-shelf (COTS) components. This research explores the feasibility of resonator sensor interrogation through practical application of SDR and RADAR techniques to the interrogation of a resonator sensor signal. This work serves as a foundation for further research on sensor interrogation through establishment of critical system parameters in the design of wireless measurement systems.

Major: Electrical Engineering

Educational Career:
Bachelor’s of Electrical Engineering, BS, 2008, University of Central Florida

Committee in Charge:
Xun Gong, Chair, EECS
Linwood Jones, Co-Chair, EECS
Wasfy Mikhael, EECS

Approved for distribution by Xun Gong, Committee Chair, on August 5, 2010.

The public is welcome to attend.