Time & Location: July 6, 2012 at 1:00 PM in ENG1 386
Title: Simulation Study of a GPRAM System: Error Control Coding and Connectionism

The General Purpose Representation and Association Machine uses lessons learned from error-control coding and low-density parity check codes (LDPC) to produce a new computing platform that utilizes hierarchal structures and vagueness to complete rough estimates of tasks. An experiment in connectionism is done to show the challenges in making such a flexible and open-ended system. Then, simulations of the GPRAM are done to show what results are possible with different codes. Simulation results can show the multiple ways that tasks can be completed with the same block codes. The GPRAM's use of approximated message-passing algorithms to improve assessment of a task is tested in a software simulation.

Major: Electrical Engineering

Educational Career:
Bachelor's of Electrical Engineering, BS, 2009, University of Central Florida
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Approved for distribution by Dr. Lei Wei, Committee Chair, on June 22, 2012.

The public is welcome to attend.