Announcing the Final Examination of Paul Varcholik for the degree of Doctor of Philosophy

Time & Location: March 17, 2011 at 2:30 PM in Partnership III 116
Title: Multi-Touch for General-Purpose Computing: An Examination of Text Entry

This research asks the question: "can multi-touch, without a text entry peripheral, provide a platform for efficient text entry? And, by extension, is such a platform viable for general purpose computing?" The investigation of this question involved four user studies that collected objective and subjective data for text and word processing tasks. The first of these studies established a benchmark for text entry performance, on a multi-touch platform, across a variety of input modes. The second study attempted to improve this performance by examining a newly developed input technique. The third and fourth studies included mouse-style interaction for formatting rich-text on a multi-touch platform, in the context of a word processing task. These studies establish a foundation for future efforts in general-purpose computing on a multi-touch platform. Furthermore, this work detailed deficiencies in tactile feedback with modern multi-touch platforms, along with an exploration of audible feedback. Finally, the thesis conveys a vision for a general-purpose multi-touch platform, its design and rationale.

Major: Modeling and Simulation

Educational Career:
Bachelor's of Computer Science, 1998, Valdosta State University
Master's of Modeling and Simulation, 2008, University of Central Florida

Committee in Charge:
Charles Hughes, Chair, EECS
Joseph LaViola, Co-Chair, EECS
Stacey Scott, University of Waterloo
Brian Goldiez, IST
Michael Moshell, Digital Media

Approved for distribution by Charles Hughes, Committee Chair, on March 3, 2011.

The public is welcome to attend.