

Where we're changing how you interact with computers forever!

OMNI ORLANDO RESORT in ORLANDO, FLORIDA

February 22nd & 23rd, 2011



**HCI in the 21st Century:
Technologies for Extending and Amplifying the Human Experience**
Wednesday * February 23rd * 2:40 to 3:15

The last few years have seen a radical change in the way we interact and live with computers. The simplification of interfacing, coupled with increased computing power and nearly ubiquitous access, means that computers are becoming a very real part of us. This panel brings together leading thinkers and developers who have, not only changed the way we think about computing systems, but have also overseen the development and application of new technologies for learning and performance. We discuss these changes and focus on how HCI in the coming years will extend and amplify human learning and performance and change what we mean by cognition.

Panel Chair: Stephen M. Fiore, PhD is faculty with the University of Central Florida's Cognitive Sciences Program in the Department of Philosophy and Director of the Cognitive Sciences Laboratory at UCF's Institute for Simulation and Training. He maintains a multidisciplinary research interest that incorporates aspects of the cognitive, social, and computational sciences in the investigation of learning and performance. He is co-Editor of recent volumes on *Macro-cognition in Teams* (2008), *Distributed Learning* (2007), and *Team Cognition* (2004). Dr. Fiore has co-authored over 100 scholarly publications in the area of learning, memory, and problem solving and has helped to secure and manage over \$15 Million in research funding.

Panelist: Charles Hughes, Ph.D. is a Pegasus Professor of Electrical Engineering and Computer Science at the University of Central Florida (UCF) in Orlando. He is also Director of the Synthetic Reality Laboratory (SREAL), Professor of Digital Media and a member of the university's Modeling & Simulation and Cognitive Sciences faculties. His research interests are in mixed reality, computer graphics, human-technology interfaces and models of computation. Applications of his research include teacher screening and training, peer pressure resistance, virtual heritage social networks, free choice learning (predominantly in museums and science centers), naturalistic decision-making, and cognitive and physical rehabilitation.

Panelist: Joseph J. LaViola Jr., Ph.D., is the SAIC Faculty Fellow and assistant professor in the Department of Electrical Engineering and Computer Science and directs the Interactive Systems and User Experience Lab at the University of Central Florida. His primary research interests include pen-based interactive computing, 3D spatial interfaces for video games, predictive motion tracking, multimodal interaction in virtual environments, and user interface evaluation. His work has appeared in journals such as *ACM TOCHI*, *IEEE PAMI*, *Presence*, and *IEEE Computer Graphics & Applications*. He has also co-authored "3D User Interfaces: Theory and Practice," the first comprehensive book on 3D user interfaces.

Panelist: David R. Pratt, Ph.D. is the chief scientist (fellow) for Science Applications International Corporation's (SAIC's) Strategies Simulation and Training business unit. As a vice president for technology, his responsibilities include developing and fostering continued leading-edge information technology and modeling and simulation technologies. He provides both strategic and tactical guidance in technical and programmatic matters. With a research base of over \$6 million per year, he oversees research in robotics, evolutionary algorithms, synthetic agent behaviors, language performance studies and user interface. Dr. Pratt also serves as the forces modeling and simulation point of contact for DoD's High Performance Computing Modernization Program.