IMI RESEARCH SEMINAR

DATE: 20 May 2014, Tuesday
TIME: 11:00 am – 12:30 pm
VENUE: IMI Seminar Room, Research Techno Plaza, XFrontiers, Level 03-01
50 Nanyang Drive, Singapore 637553
*Lunch will be served

EE Changshun Andrew
PhD Student,
IMI/WKWSCI

A Social Cognitive Theory-Based Approach to Understanding the Formation of Leadership Capabilities in Massively Multiplayer Online Role-Playing Games

Using Bandura's (1986) Social Cognitive Theory (SCT) and McCormick's (2001) SCT-applied models of leadership, this study aimed to understand the complex processes of leadership development in Massively Multiplayer Online Role-Playing Games (MMORPG) environments. Using in-depth interview data from 20 Singaporean World of Warcraft players, this study examined how environmental factors (e.g. game design, communication, and collaboration structures), personal factors (e.g. self-efficacy), and gaming behaviour affect the development of leadership capabilities. The findings suggest that Bandura's and McCormick's frameworks are useful in explaining how these factors contribute to leadership development, with some examples including: 1) game designs that allow for formalised leadership roles can create better opportunities for leadership development, and 2) self-efficacy, an important trait for leadership development, can be cultivated through confidence gained by reinforcing knowledge, skills, and abilities (KSAs) through repeated application of these KSAs in similar situations.
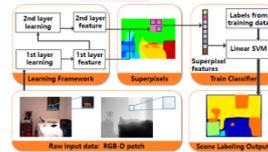
WANG Anran
PhD Student,
SCE

Multi-modal Unsupervised Feature Learning for RGB-D Scene Labeling

Most of the existing approaches for RGB-D indoor scene labeling employ hand-crafted features for each modality independently and combine them in a heuristic manner. There has been some attempt on directly learning features from raw RGB-D data, but the performance is not satisfactory. In this paper, we adapt the unsupervised feature learning technique for RGB-D labeling as a multi-modality learning problem. Our learning framework performs feature learning and feature encoding simultaneously which significantly boosts the performance. By stacking basic learning structure, higher-level features are derived and combined with lower-level features for better representing RGB-D data. Experimental results on the benchmark NYU depth dataset show that our method achieves competitive performance, compared with state-of-the-art. \keywords{RGB-D scene labeling, unsupervised feature learning, joint feature learning and encoding, multi-modality.

DINH Quang Huy
PhD Student,
IMI/MAE

Secured and Multi-Modal Interface with Augmented Reality for Industrial Application

Augmented reality (AR) is a new emerging technology that takes digital or computer generated information, whether it be images, audio, video and touch or haptic sensations and overlaying them over in a real-time environment. At the moment, people are developing many AR applications for entertainments, advertisements or immersive games. In term of industrial contexts, this kind of technology can take an important role in enhancing the interface between human and machines. This presentation will give a short introduction to this new technology, a literature review in term of applications and propose a model for designing an interactive interface for industrial purposes.

ENG Weiwen Herbert
PhD Student,
HSS/ SPMS

Veracity in Pseudonymous and Anonymous Online Environments: Does the Truth Prevail?

Anonymous social sharing applications on the modern mobile device have recently garnered both popular use and investor support, especially in the United States. The discourse on these applications is typically confessions made under the veil of dissociative anonymity, where the user has no fear of the consequences that occur were s/he had made the revelation in a way that identifies her/him. Truth default theory theorizes that people are likelier to accept a confession made offline as true rather than false. Does this tendency apply online, under pseudonymous, anonymous and invisible conditions where it is impossible to pick up visual cues that signify deception? Most of extant literature on anonymity in online behavior probably has too much of a focus in comparisons between simple anonymity and offline identified settings. It is important we recognize that anonymity may not be such a bad thing and begin to dissect differences in terms of social behavior between pseudonymity, where entities are distinguishable, and anonymity, where entities are indistinguishable. We also consider possible interaction effects from authenticated vs. non-authenticated settings.

Please click here to register