

IMI RESEARCH SEMINAR

DATE: 10 March 2015, 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



Dr Aryel BECK
Research Fellow,
IMI

Motion Control for Social Behaviours

Creating social robots that can interact with humans autonomously is a growing and promising field of research. Indeed, there has been a significant increase in the number of platforms and applications for social robots. However, robots are not yet able to interact with humans in a natural and believable way. This is especially true for physically realistic robot that can be affected by the Uncanny Valley. Such robots need to produce behaviours that match its physical realism. In this talk, I will describe methods that allows such a robot to fully use the same modalities as humans during interaction. These include socially relevant speech, facial and bodily expressions.



Jaroslav Slawomir KOCHANOWICZ
PhD Student,
MAE / IMI

Psychological and Sociological Inspirations in Development of Believable Social Agents

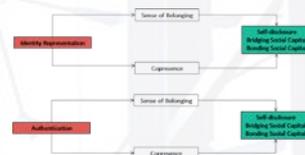
This research aims to develop elements of a cognitive-affective architecture for believable agents capable of generating complex social behavior for various applications. Existing models will be improved and expanded by certain significant concepts from psychology and sociology, enabling implementation of agents with more believable personality, values, morality, goals, styles, social identities, culture, world model, individual social maps and other characteristics. Afterwards this flexible and reusable model will be embedded in various environments as a basis of simulation of an emergent, dynamic and interactive social structure of believable society.



DINH Quang Huy
PhD Student,
MAE / IMI

Multimodal Interface with Augmented Reality for Industrial Applications

Despite technological advancement in improving the interface between humans and robots, designing a user-friendly and intuitive industrial interface remains one of the most technical challenging problems for researchers. Current industrial interfaces encounter some limitations that make it hard for them to be accepted as standardized tools for interacting with the robot. The project will propose a novel device to interact with industrial robot, particularly in shipping and construction industry that is capable of overcoming the limitations of the current interface and identify a framework for Human-Robot interaction that recognize s the deficiencies of current systems.



ENG Weiwen Herbert
PhD Student,
IMI

Strength of Ties in a Mobile Community under Conditions of Anonymity

Anonymous and pseudonymous social networks have captured the interest of both social network researchers and tech journalists since the age of MySpace and Friendster. The current study seeks to contribute to extant research concerning the effects of online discursive anonymity in the context of campus communities. Its central thesis is that contrasting conditions of discursive anonymity manifest according to a 2x2 full factorial framework (Identity Condition: anonymous vs. pseudonymous x Authentication: Present vs. Absent) would predict significant differences between the conditions in levels of the measures of social cohesion. A longitudinal field experiment will be conducted where the intervention employed will be the use of Fessup, an anonymous social network for community confessions. Fessup is a work-in-progress mobile application accessible via iOS and Android.