



# IMI PhD Interdisciplinary Seminar

**DATE:** 25 February 2013, Monday

TIME: 10:00 am - 12:45pm

VENUE: IMI Seminar Room, Research Techno Plaza, XFrontiers, Level 03-01

50 Nanyang Drive, Singapore 637553

\*Lunch will be served





Yasir TAHIR PhD Student EEE-IMI

### REAL-TIME FEEDBACK FOR MONITORING AND FACILITATING DISCUSSIONS

Our system aims at providing real-time feedback about speaking mannerisms, generated from audio and video signals. The system extracts several speech and visual cues from the on-going conversation and these cues are used as features and employed in machine learning algorithms to extract higher level characterisation of the speaking mannerisms. That information is eventually exploited to generate real-time feedback for every participant in the meeting. It can inform the speakers about their speaking mannerisms, and if needed, provide guidelines. Several platforms are being explored to provide feedback. This includes a Skype application, Android application and Nao robot which can act as a social moderator.



#### SIMULATION AND AUTOMATIC NAVIGATION OF AN INTRAVASCULAR SYSTEM

During the minimally invasive surgery process, a catheter is manipulated to reach the target organs by the surgeon manually.

This project aims at making the process easier to operate under safe precondition by designing an automatic intravascular navigation system, which consists of catheter modeling, control and navigation. To model the property of the catheter, we consider the forwarding/backwarding and twisting movement first. A device taking care of accurate input has been designed. After the simulation we can evaluate the navigation system by comparing the calculated position with the actual position.

### PhD Qualifying Examination Presentation



EE Changshun Andrew PhD Student IGS-IMI & WKWSCI

# THE ROLE OF SOCIAL PRESENCE ON THE DEVELOPMENT OF LEADERSHIP CAPABILITIES IN MASSIVELY MULTIPLAYER ONLINE ROLE-PLAYING GAMES

The prevalence of Massively Multiplayer Online Role-Playing Games (MMORPGs) in recent times has spurred a wealth of research concerning their impact on society. One such impact studied, although currently limited in the literature, is the development of leadership capabilities through MMORPG gameplay. Given the centrality of social presence – as defined in this proposal – in socially immersive technologies such as MMORPGs, examining leadership capabilities development in MMORPGs from the perspective of social presence and its role on such development may prove invaluable since players' social interactions shape their in-game experiences. As such, this project proposes an in-depth investigation on the role of social presence on the development of leadership capabilities in MMORPGs via the qualitative method of participant observation – in order to gain a thorough understanding of how this works in context.