Title: Multimodal analysis and recognition of social signals: application to social stance generation in virtual agents (ISIR-LTCI)

Supervisors: G. Richard, C. Clavel and K. Bailly

Abstract: The Image and Signal processing department of Telecom-ParisTech (http://www.tsi.telecom-paristech.fr/en/) and the ISIR Institute (Institute for Intelligent Systems and Roboticshttp://www.isir.upmc.fr/?lang=en) from UPMC (Université Pierre et Marie Curie) are looking for a PhD candidate to carry out research on the analysis of visual features (facial expression and head movements, see Nicolle & Bailly, 2012) and audio features (linguistic and prosodic, see Clavel & Richard, 2011) characterizing social stances, such as dominance (Burgoon, 1999) (Ravenet, Ochs & Pelachaud, 2013). In particular, the PhD will study the various timing and sequencing of the features coming from the different modalities. The long run goal is to integrate these features in a model for the production of social stances in an Embodied Conversational Agents (ECA).

The work will be carried out within the context of the Sense project (http://www.smart-labex.fr/index.php?perma=SeNSE). The project focuses on socio-emotional signals in interactions and deals with research issues covering the signal capture (audio, video, neurophysiologic), the socio-emotional signal interpretation and modelisation and its exploitation (virtual agents, musical interaction, group of persons). The model developed through the project will be evaluated through realistic scenarios.

Some references:


