Welcome to Seminar 14131: Computational Models of Cultural Behavior for Human-Agent Interaction

This document forms the basis for the in-seminar Wiki page to which you can add topics and suggestions.

## **Preliminary Programme**

Here is an initial structure for the programme. It can of course be modified as we go along.

	Monday	Tuesday	Wednesday	Thursday	Friday
9.00: Session 1	Welcome/Intro (Ruth) 60 second intros (All)	Sarit Kraus: When Is it Beneficial to Develop Culture Sensitive Negotiation Agents?	9-9.30 Plenary: first working group feedback David Traum: Models of culture for human-agent dialogue	Lewis Johnson: Effective Cultural Models: An Industry Perspective	Wrap-up
10.30	Coffee	Coffee	Coffee	Coffee	Coffee
Session 2	Goals (Ruth) Ideas gathering (All)	Break-out sessions	Justine Cassel: Dyadic models of cultural interaction	Break-out sessions	Informal discussion
12.15	Lunch	Lunch	Lunch	Lunch	Lunch
Session 3	Gert Jan Hofstede: Robot and agent culture	Jens Allwood: Cultural perspectives on communication	Social outing	Break-out sessions	DEPART
3.30	Coffee	Coffee	Coffee	Coffee	
Session 4	Demos/posters	Break-out sessions	Social outing	Break-out sessions 4pm Further posters and demos	
18.00	Dinner	Dinner	Dinner	Dinner	
Evening	Cultural TrainingGames: Barnga, Bafa Bafa	This is Us: Participants present artefacts from their own culture (stories, songs, dances, food, drinks etc.)	Meal elsewhere	This is Us Again: Spontaneous talks, anecdotes about scientific cultures, examples of cultural misunderstandi ngs etc. Presentation of additional cultural items	

# Goals

The Seminar has to have a final report which must include:

- a) Abstracts of all speaker presentations: Speakers, please add to the Uploads page where you out your Intro slides BEFORE YOU LEAVE!
- b) Outcomes of working group discussions (from the break-out sessions). Each group discussion must appoint a Rapporteur: please add names to the Working Groups list below and upload notes and slides to the Uploads page where you put your intro slide. Again, BEFORE YOU LEAVE!

Other goals are for us to determine – see possible list below:

### Extra Goals

Do we want to develop a Road Map?

Do we want to produce a book?

# Questions identified by the participants:

To identify relevant topics to be discussed at the seminar, we already initiated a survey among experts with an interdisciplinary background. Based on this survey, the seminar will consider four key areas (the questions have been provided via email by about 25 members of the research community):

### Foundations of computational models of culture

- How do different disciplines (psychological, anthropological, and sociological) approach and conceptualize culture and how does the disciplinary perspective affect computing models?
- What are the intersections between culture, personality, gender etc.?
- How to decrease the risk of cultural stereotyping during model building?
- How to handle cultural variation and change?

### Paradigms for cross-cultural data collections

- Where can we find solid ground for culture-specific agent behavior?
- What kind of culture-specific behavioral data should be collected and how should the data be coded?
- · How to separate individual from culture-specific variations in the collected data?
- How to handle the interdependencies between culture, emotions and personality in data collections?
- How to create a databank for observation-based studies of cultural differences?
- How to exchange corpora of culture-specific verbal and non-verbal behaviors?

### Building computational models of culture

- What is the right level of abstraction for representing cultural differences in a computational model?
- How to operationalize existing cultural theories from the social sciences?
- How to model the impact of culture on emotion and decision making in social settings, such as negotiation or conflict resolution?
- How to build dyadic models of cultural interaction between humans and agents?
- How to tailor multimodal verbal and non-verbal behaviors to an agent's assumed cultural background?
- How to handle interactions between culture, affect, and cognition, and their impact on individual agent design, multi-agent interactions, and agent-human interactions?
- How to model the influence of culture on the agent's theory of mind?
- How to model culture as a plug-in on existing models?

### Evaluation of computational models of culture

• How to evaluate computational models of culture and the agents based on them?

- How to evaluate the effect of the interaction between the agent's culture and the human's culture?
- What could be a proper metrics for such assessments?
- What test base is needed before a simulation can be deemed cross-culturally valid?
- How to handle the interaction of culture with other individual characteristics, such as emotion and personality in such evaluations?
- How to address the cultural bias of researchers and scholars in evaluations?