

User Models for Motivational Systems: The Affective and the Rational Routes to Persuasion

2nd international workshop
In conjunction with UMAP 2011
11 July 2011, Girona, Spain

Preface

Recent years have witnessed the growth of three parallel strands of research, all directing towards a more complex cognitive model of rational and extra-rational features, involving emotions, persuasion, motivation and argumentation.

On one side, Persuasive Technology is emerging as a very strong research field, interested in the use of interactive systems to influence human thought and behaviour. The international [Persuasive](#) conference is now well established at its 6th edition, and a series of other small events, like the Persuasive Technology Symposia (with AISB in [2008](#) and [2009](#)), and workshops about persuasive technology at Aml2009 and Measuring Behavior 2010, confirm the importance of the field in the research landscape.

Parallel to this, Affective Computing is interested in the use, understanding and modelling of emotions and affect in computer systems. From the early 90s, which also saw two UM workshops (at [UM03](#) and [UM05](#)), Affective Computing is now an established discipline, with an international conference ([ACII](#)), a professional society ([HUMAINE](#)) and, recently, a new journal ([IEEE Trans. on Affective Computing](#)).

Finally, Argument and Computation is also emerged in the past decade as a research strand interested in computational models of theories of argumentation and persuasion coming from Philosophy and Artificial Intelligence. Again, an increasing number of events dedicated to the topic, including two annual workshop series ([Argumentation in MultiAgent Systems](#), now at its 8th edition, and [Computational Models of Natural Argument](#), at its 11th edition) and a biennial international conference ([COMMA](#)), have recently been complemented by a new journal ([Argument and Computation](#)).

Following on from the [workshop](#) organised at UMAP 2010, this workshop intended to sit at the intersection between these three areas of research, and **focus on how adaptive and personalised systems can motivate people**, for instance to improve health, or to use sustainable resources, or to achieve goals or specific skills, by using persuasion and argumentation techniques and/or techniques involving the affective and emotional sphere.

The workshop's call focused on strategies, techniques and evaluation for motivational systems that tailor to cognitive and affective state of the individual. Suggested topics were:

- user models for persuasive motivational systems: Modeling receiver involvement, and position; Modeling personality and affective state for persuasion, Identifying relevant affective aspect in user modeling, Integrating affective and non-affective aspect in user models, Recognition and interpretation of the users' communicative intentions and affective states and updating of the user model, Investigating the relationship between recognized affective states and their impact on users' beliefs and motivation, Effect of cultural differences on persuasion;
- adaptive strategies for persuasion: Generating persuasive arguments; Ontologies for persuasion; Persuasive discourse processing: understanding what users say in terms of argumentation schemes; Computational models of argumentation tailored to a specific user; Rhetoric and affect: the role of emotions, personalities, etc. in models of persuasion and argumentation;
- motivation and affect: mutual interactions and synergies, peripheral routes of persuasion (humor, mood induction, enhancing source credibility)
- persuasive interfaces: ambient persuasion, use of embodied conversational agents, serious games
- applications and evaluations: in intelligent tutoring systems, health promotion, e-democracy, advertising, entertainment, coaching, decision support.
- ethical issues and evaluation of the impact of affective factors in motivation

We trust we managed to gather together an interesting set of papers on these topics, and we look forward to an interesting and stimulating event.

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