Designing Humour in Human Computer Interaction (HUMIC 2017)

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Abstract. Humor is a social phenomenon pervasive in all human societies. Due to its importance in interpersonal relations, in this workshop we are focusing on the integration of humor in HCI exploring its benefits and downsides, as well as design and evaluation approaches for humorous machines. The workshop will provide a forum for discussions to all researchers and practitioners interested in this topic covering both verbal and non-verbal aspects of humor in HCI.

Keywords: Humor · Human computer interaction · Artificial intelligence · Verbal and nonverbal interactions

1 Introduction and Motivation

Humour is pervasive in human social relationships and one of the most common ways to produce a positive affect in others. Research studies have shown that innocent humour increases likeability and interpersonal relations, boosts friendship and trust, fosters social cohesion, alleviate stress, reduce tensions, encourage creativity and improve teamwork [1]. Humour can be spontaneous or be deliberately used not only in conversations with friends, but also in more formal environments [2]. Large corporations such as IBM, Kodak and AT&T hire humour experts to help improve teamwork, stimulate creativity and motivate employees [3].

While humour is a well-established branch in artificial intelligence and natural language processing communities, in the HCI field humour appears to be rather a marginal research topic, despite its positive effects scientifically proven by decades of research [4]. One reason is that HCI traditionally focus on interfaces meant to increase task performance on one side, and minimize task duration, learning time and error rate, on the other side. Since the use of humour would distract the users from their tasks increasing the total completion time, it would contradict HCI policies of maximizing efficiency in interaction [1]. However, researchers in the field showed that such assumptions are not true task competition time and amount of effort to be mainly unaffected by incorporating humour in interaction [9].

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In the future we can expect HCI to become less goal directed, not only in entrainment computing, but also in our ordinary daily life. Technology moves slowly from our working environments to our living rooms where computers and artificial entities become social actors [8]. In a such context, it is important for designers to take into account the social aspect of interaction between humans and computers as humour might become an influential ingredient towards technology acceptance and overall satisfaction.

2 Topics of Interest and Goals

Humour embraces various types of expression - both verbal (puns, jokes, irony, incongruity etc.) and non-verbal (situational humour, mimic, gestures etc.) and can be used to enhance the interaction outcome [7] while being socially and culturally appropriate. In this context, HUMIC (**HUM**or in **I**ntera**C**tion) workshop aims to explore challenges in designing [5] and evaluating [6] humourful interactions, as well as benefits and downsides of using humour in interactive tasks with artificial entities. The workshop will provide a platform for discussions on how humour can help designing better user experiences in HCI by responding to questions, such as:

- How knowledge from different disciplines, e.g. linguistics, psychology, sociology, literature, art, comedy etc. can help designing funnier interaction with technology?
- What methods and approaches are appropriate for creating humour in HCI?
- What cultural and social constrains apply when designing humorous interactions?
- What situations can benefit/suffer from using humour in interaction with machines, e.g. where humorous interaction should/shouldn't be used?
- What characteristics poses an interactive humours system in order to be called funny, e.g. how to evaluate humorousness?
- Can humour in HCI be useful beyond its intended purpose, e.g. can comedians use interactive technologies to create humorous situations?

The discussions are however, not limited to the above questions as the ultimate goal of the workshop is to deepen and broaden the understanding towards the appropriate design of humours interactions with technology.

3 Target Audience and Expected Outcome

The audience targeted are researchers and practitioners from a wide range of disciplines, including human-computer interaction, computational linguistics, artificial intelligence, psychology, media and arts interested in the topic of humour. The accepted workshop position papers will be published in the official adjunct conference proceedings. Extended versions of selected papers will be invited for a special issue in a journal (currently being organized). More information is available on the workshop website: http://workshop.colips.org/humic/.

4 Workshop Plan

HUMIC will include a keynote talk, short presentations of accepted papers, discussion sessions, as well as a hands-on design exercise session, during which workshop participants - divided into small groups - will design an interactive humours application in a given context; the groups will present their work at the end of the workshop.

5 Organizers

- **Prof. dr. ir. Anton Nijholt -** *University of Twente, HMI, The Netherlands*
  Anton Nijholt has a background in human-computer interaction and entertainment computing. He is part of the Human Media Interaction group of the University of Twente, and is also involved with the Imagineering Institute in Johor Bahru, Malasia. He has been program chair of the main international conferences on intelligent agents, multimodal interaction, affective computing, faces & gestures and entertainment computing. His recent (edited) books are on playful user interfaces, entertainment computing, and playable cities. In recent years he published many papers on humour and digital technology, in particular humour in smart environments
- **Dr. Andreea I. Niculescu -** *Institute for Infocomm Research (I^2R), Singapore*
  Andreea I. Niculescu works as a scientist at Institute for Infocomm Research, in the Human Language Technology department, Dialogue Technology Group. Her main interests are UX and interaction design focusing on user interface for speech and multimodal interactions. Her current research work is concerned with the use of humour for enhancing interactions with dialogue systems and social robot.
- **Dr. Alessandro Valitutti** - *Università di Bari, Italy*
  Alessandro Valitutti is currently working as a senior researcher at the Dept. of Computer Science, University of Bari, Italy. He is involved in the SentiQuest Project, whose primary goal is to automatically detect irony and sarcasm in online Q&A websites and social networks. His past research activity was mainly on the computational treatment of emotions, creativity, and humour. Specifically, he developed ideas and resources for sentiment analysis and affect detection from texts, kinetic typography, humour generation, computational poetry, and fictional ideation. More recently, his interest is focusing on interactive humour.
- **Dr. Rafael E. Banchs** - Institute for Infocomm Research (I^2R), Singapore
  Rafael E. Banchs is currently the Head of the Dialogue Technology Group in the Human Language Technology department within the Institute for Infocomm Research in Singapore. His recent areas of research include Machine Translation, Information Retrieval, Cross-language Information Retrieval, Sentiment Analysis and Dialogue Systems. More specifically, he has been working on the application of vector space models along with linear and non-linear projection techniques to improve the quality of statistical machine translation and cross-language information retrieval systems, as well as on chatbots using humour as a mechanism to support error recovery.

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