

(for 5 min talk)

Can We Talk? What Bots can do in our Cyberspace and does it matter?

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The digital world is a paradise for Web robots (algorithms, Bots), where they perform different functions. Now days, there are increasingly many practical tasks that the algorithms do instead of humans, thus shaping the (virtual) reality in which human activity and interactions also occur. Another interesting aspect is the use of Bots for direct communication with human users. Recently research of social dynamics on different portals unraveled that in mutual communications, users exchange documents with information (knowledge) contents and emotions [see Cyberemotions project summary <http://www.cyberemotions.eu/>]. Based on quantitative analysis of such contents in the empirical data (MySpace, Blogs, Digg, Chats) and using agent-based modeling of these systems, our research team developed methodology to identify occurrence of social networking and collective behaviors of users and to determine the role of emotions in the underlying dynamics. Moreover, this approaches revealed that including suitably designed Bots may alter the collective states of the system, making it susceptible to emotion (and information) processing.

In this ignite talk, using several illustrative results, we would like to point out some key features of human—Bot interactions online and discuss if the presence of Bots in the process can be recognized by a systematic analysis of logged data. Furthermore, within agent-based modeling approach, we would like to show an efficient Bot at work and comment the origin of its efficiency. Finally, given practically unlimited capabilities of Bots, an immediate list of open questions arises, specifically, how the Bots should be used and does it matter for human users?