

Emotions in social web

EmoQuest project is dedicated to collaborative knowledge building

Nowadays people are increasingly likely to search for information in social media, including online Question and Answer (Q&A) sites. For example, Stack Overflow is a popular community of code developers, with 5.5 million users providing 19M answers to 12M questions. In Stack Overflow the knowledge building is based on collaboration among the community members and questions, answers and users are subject to a reputation award process. In the true spirit of gamification, the reputation system motivates users to generate high quality contents thus turning Stack Overflow in the most authoritative source of knowledge for software developers. One of the biggest

drawbacks of communication through social media is to appropriately convey sentiment through text. Web users are not necessarily prepared for effectively dealing with the social media barriers to non-verbal communication. Thus, the design of systems to support the emotional awareness between communicators is an important technical and social challenge for research related to computer-supported collaboration. Understanding the role of emotions in online Q&A sites is the main goal of EmoQuest, a three-year project funded by the Italian Ministry of University and Research under the program “Scientific Independence of young Researchers” (SIR 2014). The project is coordinated by Nicole

Novielli, researcher at the University of Bari ‘Aldo Moro’ and member of the Collaborative Development Research Group. EmoQuest aims at shedding new light on how emotion expression facilitates or impairs effective knowledge sharing, that is how the emotional style of questions and answers incentives contributions, determines the perceived quality of the information provided, and affects the reputation of users in Q&A sites. The research domain of EmoQuest is Computer Supported Cooperative Work (CSCW), a multi-disciplinary field emerged in the 80s and recently boosted by the rise of the Social Web. The research will produce an advancement of the state of the art for some of the disciplines which guide and contribute to CSCW and in which the team members have a strong research expertise, namely Software Engineering, Human-Computer Interaction, Linguistics and Psychology. The team will combine emotion modelling with affective computing and natural language processing techniques to build large-scale, robust approaches for sentiment detection in interactions on Q&A sites. Empirical studies will be performed, exploiting data from Stack Exchange, a growing network of over 150 Q&A sites about a broad range of diverse topics, which includes Stack Overflow. Among the expected outputs of EmoQuest there is a user-driven netiquette for Q&A to incorporate emotion awareness in social media interaction. Thanks to the empirical studies, it will be possible to build new psycho-linguistic models about emotion and sentiment expression through language, upon which to build new affect recognition techniques and sentiment analysis tools.

