Editor's Note

The science of happiness is trans-disciplinary. Happiness is an experience human beings have and, in consequence, its understanding calls for knowledge from all disciplines which, in one way or the other, deal with all facets of human lives. Various disciplines have contributed to the development of the science of happiness; among them: Psychology, Sociology, Economics, Psychiatry and Neuroscience. Because happiness research deals with human being of flesh and blood, it requires high-level techniques to dealing with large information sets in order to extract that information which is relevant. In the study of happiness there are many observations –as many as persons in the world-, there are many variables, and there are many interrelations and synergies to take account of. In consequence, happiness research benefits from sophisticated models that allow for a better understanding of people's happiness; without losing contact with what real human beings experience, it is important to use techniques that allow researchers to process all the information reaching for valuable conclusions. It is with this purpose that Computer Science has joined the other disciplines providing its calculation powerful tools to advance the study of happiness. It is therefore appropriate that The International Journal of Interactive Multimedia and Artificial Intelligence has decided to launch a special issue on happiness showing some of the potential contributions the discipline can make to happiness research.
The research works presented in this issue cover various topics of interest, all related to potential contributions from Computer Science to the understanding of happiness and subjective well-being.

The paper of Yago Saez, Carlos Navarro, Asuncion Mochón and Pedro Isasi, *A System for Personality and Happiness Detection*, proposes a platform for estimating personality and happiness. Numerous studies have been conducted on happiness and personality since Hans Jürgen Eysenck defined in 1947[1] the basic traits that delineate personality. These works have supported the theory of individual differences across humans with regards to personality [2], [3]; most research has used questionnaires as a direct ways to obtain a score for each trait (Psychoticism, Extroversion and Neuroticism) [4]. However, there may be alternative ways to knowing people's personality; one highly-potential way is through analyzing written text. This type of approach offers numerous advantages for researchers because a substantial amount of information about a subject's personality profile can be obtained without their presence or any additional specific effort on the subject's part. Although research on personality profiling and analysis of the written word is part of psychology, collaboration with computer science is necessary to be able to use quantitative methods to analyze large amounts of information [5]. Departing from Eysenck's human personality theory, the authors develop a platform for collecting text messages from social media (Whatsapp), and for classifying them into different personality categories. Although there is not a clear link between personality features and happiness, some correlations between them could be found. In this work, the authors describe the platform developed, and as a proof of concept, they use different sources of messages to see if common machine learning algorithms can be used to classifying different personality features and happiness.

The paper of Francisco Mochón and Oscar Sanjuán, *A First Approach to the Implicit Measurement of Happiness in Latin America through the Use of Social Networks*, aims to measure subjective well-being in Latin America on the basis of large-information databases that require novel information-management techniques [6]. The paper's goal is to verify to what extent two radically different methods are consistent in measuring the happiness of Latin Americans. One method is based on the use of surveys [7], while the other is based on inferring the feelings of social-network users from a semantic analysis of the words used in their communications and messages [8]. Following a previous study by Dodds and Danforth, the researchers have developed a method that, by incorporating a direct assessment of words, allows to measure subjective well-being on a continuous scale from a diverse collection of texts [9]. The method is transparent and able to quickly process texts from the Internet.

The study of happiness requires taking into consideration that it is a living experience that happens to persons and not to individuals [10]. Happiness is experienced by persons who are in society and who are living in their circumstance. Thus, the understanding of happiness requires from incorporating a person's context, which implies for the need of incorporating how people interact with others [11]. The paper of Mariano Rojas and Ignacio Ibarra-López, *Happiness and Human Relations: The Role of Materialistic Values. An ABM Illustration*, argues that a person's happiness must be understood as a phenomenon that emerges not only from her individual condition but also from her place in society [12]. Understanding that a person is socially immersed implies giving a greater role to social interactions and social structure. The paper presents a model to take into consideration the role of human relations. An agent-based model (ABM) is used to illustrate the implementation of the model in understanding people's happiness. This allows stressing the role that social interactions play in generating happiness within different value contexts. In specific, the paper studies how materialistic values influence the way rational agents end up following in their pursuing of happiness [13]. The model recognizes that people do interact in the generation of relational goods and their happiness does not depend on their isolated decisions but also on what their fellows do. The model explains how rational people end up allocating their limited endowment of time between working and relating; the model also assumes that people are statically rational while they are dynamically bounded-rational.

The research conducted by Héctor Cordobés, Antonio Fernández Anta, Luis F. Chiroque, Fernando Pérez, Teófilo

Redondo and Agustín Santos deals with *Graph-Based Techniques for Topic Classification of Tweets in Spanish*. / Topic classification of texts is one of the most interesting challenges in Natural Language Processing (NLP) [14]. In the field of the happiness research it is important to combine sentiment analysis with topic classification techniques, in order to determine the reasons why a subject express happiness or sadness. Topic classifiers commonly use a bag-of-words approach, in which the classifier uses (and is trained with) selected terms from the input texts [15], [16]. The work included in this special issue presents techniques based on graph similarity to classify short texts by topic [17], [18]. A prototype classifier was developed and was used to participate in the topic classification challenge of the Workshop on Sentiment Analysis at SEPLN in- 2013. For topic classification, a set of Twitter messages (tweets) in Spanish were provided. The authors build graphs from the input texts, and then use properties of these graphs to classify them.

The work of José Manuel Saiz-Alvarez, Alicia Coduras Martínez and Carlos Cuervo-Arango Martínez, *An Entrepreneurial Well-being Model based on GEM Data for Spain*, focuses in the consideration given to entrepreneurship as a determinant of well-being [19], [20]. The authors present a venture-based model in which satisfaction of Spanish entrepreneurs with their professional life is performed. More specifically the paper studies the relationship between entrepreneurship and well-being using Global Entrepreneurship Monitor (GEM) data. The results show that, for the Spanish case, there is a strong consistency en the results, the opportunity entrepreneurs present greater satisfaction then necessity entrepreneurs

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