Editorial

This volume of the journal "Research in Computing Science" contains selected papers related to computational linguistics and its applications. The papers were carefully chosen by the editorial board on the basis of the at least two reviews by the members of the reviewing committee or additional reviewers. The reviewers took into account the originality, scientific contribution to the field, soundness and technical quality of the papers. It is worth noting that various papers for this special issue were rejected.

The volume contains 11 papers about various aspects of computational linguistics. Sentiment analysis or opinion mining is an important topic today, because of its potential applications in a wide variety of business. Three papers are about this topic dealing with different applications. The first one considers opinions in Twitter in order to analyze how verbs influence in gender opinions in various domains such as sports, movies, politics, entertainment, etc. The second one deals with aspect-based polarity detection using an n-gram approach, i.e., the positive or negative sentiment over different aspects such as food, service, ambience, among other, for restaurant and laptop domains in a well-known SemEval evaluation campaign. The third one considers gas station aspects to extract main features related to emotions (security, happiness, etc.), that make consumers prefer a gas station over others; the approach rely on machine learning techniques and statistical analysis to identify the relevant features such as customer's age and gender, average gasoline consumption, coffee shop, closeness, quick service, light place, etc.

Classification task is another fashion topic. The papers in this direction are from a point of view of data preprocessing facet to applications. In the case of data preprocessing, the authors show how sets of feature configurations influence in the performance of classification algorithms for plagiarism detection task, in the context of popular PAN competition. In the case of applications, two papers are about classifying an event in medical and personal assistant domain, respectively. In the medical domain, the authors show the performance of six classification algorithms (SVM, Naive Bayes, KNN, etc.) to classify two classes of cancer (colon or brain) based on textual medical records of patients; they use different text units (unigrams, bigrams, and 3-grams of characters) as textual representations, and TF-IDF as weighting scheme. In the personal assistant application, the authors analyze the user's email contents to identify events, and extract details of the event based on rule-based patterns to schedule automatically into the user's agenda.

Also, developments on learning object, recommender systems, and information retrieval system are topics of current interest. Here, a metric for comparing designs of learning objects is proposed; it is based on information of a fixation measure using eye tracking data, and entropy-based approach. The recommender system gives an analysis of the best cloud services according to the user's needs. The cloud services are tested

according to the user's selection criteria such as security, privacy, data storage, etc. In information retrieval systems, typically, a user's query (group of concepts) is searched in the document collections, here, it is proposed an expansion of user's queries in order to increase the accuracy of systems; the approach is based on ontologies of four domains (oil, tourism, e-learning, and artificial intelligence), and semantic relations of WordNet in order to expand the original queries.

Finally, written language is of current interest as well as spoken and sign language. According to the topic of spoken language, a broad survey of Spoken English learner corpora is given. The corpora described include recordings of speeches for various first languages (L1) such as Chinese, Spanish, Arabic, French, etc. For instance, there are texts spoken by English learners (L2, second language) whose first language is Spanish (L1). Also, a system for translating sing language to text is presented; in this work, the authors use image analysis and pattern recognition to interpret the sign and map it to the corresponding text according to the Mexican Sign Language.

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