



Visualization and detection based on user behavior typing

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Abstract-Sentimental analysis also known as opinion mining refers to the use of natural language processing, text analysis and computational linguistics to identify and extract Linguistics to identify and extract Subjective information in source materials. Sentiment Analysis (SA) is ongoing field of research in text mining field However, there are still some challenges to overcome before sentiment analysis have become a perfect tool. In this paper, a novel sentimental analysis approach is proposed to determine whether the attitude behind the text is happy, slightly tensed, tensed, very tensed or normal. By considering the parameters such ascount of backspaces, count of delete button and typing speed everyone would be able to judge an individual's temperament at that point of time and can give suggestions to change the mood if the user is in negative attitude.Based on the analytics of the user history of typing and live typing parameters,effective visualization of user behavior is obtained.

Keywords: Sentimental Analysis, Typing Speed, Natural language Processing

1. INTRODUCTION

The main motivation of this project is Sensitivity analysis. This is the study of how the uncertainty in the output of a mathematical model or system (numerical or otherwise) can be apportioned to different sources of uncertainty in its inputs.A related practice is uncertainty analysis, which has a greater focus on uncertainty quantification and propagation of

uncertainty. Ideally, uncertainty and sensitivity analysis should be run in tandem.

Sensitivity analysis can be useful for a range of purposes,including

- Testing the robustness of the results of a model or system in the presence of uncertainty.
- Increased understanding of the relationships between input and output variables in a system or model.
- Uncertainty reduction: identifying model inputs that cause significant uncertainty in the output and should therefore be the focus of attention if the robustness is to be increased (perhaps by further research).
- Searching for errors in the model (by encountering unexpected relationships between inputs and outputs).
- Model simplification – fixing model inputs that have no effect on the output, or identifying and removing redundant parts of the model structure.
- Enhancing communication from modellers to decision makers (e.g. by making recommendations more credible, understandable, compelling or persuasive).
- Finding regions in the space of input factors for which the model output is either maximum or minimum or meets some optimum criterion (see optimization and Monte Carlo filtering).

Taking an example from Social Networks, in any census based process there are always variables that are uncertain. Like Comments,

posts, feeds and other variables may not be known with great precision. Sensitivity analysis answers the comment, "if these variables deviate from expectations, what will the effect be (on the business, model, system, or whatever is being analyzed), and which variables are causing the largest deviations.

2. SYSTEM ANALYSIS

Opinions expressed in social networks play a major role in influencing public opinion's behaviour across areas as diverse as buying products, capturing the "pulse" of stock markets and voting for the president. An opinion may be regarded as a statement in which the opinion holder makes a specific claim about a topic using a certain sentiment. Web-generated opinions in blogs and social networks have recently become a valuable resource for mining user sentiments for the purpose of customer relationship management, public opinion tracking and text filtering.

Online opinions have been recently analyzed using sentiment analysis (SA). This is basically a natural language processing (NLP) application that uses computational linguistics and text mining to identify text sentiment, typically as positive, neutral or negative. This technique is also known in the text mining literature as emotional polarity analysis (EPA), opinion mining, review mining, or appraisal extraction. Thus, SA can be regarded as an automated knowledge discovery technique that aims at finding hidden patterns in a large number of reviews, blogs or tweets. To calculate a sentiment score, the sentiment obtained from the text is compared to a lexicon or a dictionary to determine the strength of the sentiment. For example, the lexical resource Senti Word, which includes around 200,000 entries, uses a semi-supervised method to assign each word with positive, negative and

objective scores. For instance, as Fig. 1 illustrates, a

Negative word might have in one of its senses a sentiment score of negative 0.375, positive 0.125 and objective 0.5. Knowledge obtained from social networks is extremely valuable because millions of opinions expressed about a certain topic are highly unlikely to be biased. The affective nature of such opinions makes them easily understandable by the majority of readers, which increasingly make them the basis for making decisions regarding marketing research, business intelligence, stock market prediction and image monitoring. However, almost all online text-based communications ignore the rules of spelling and grammar. In fact, Web texts have been classified as noisy as they still pose considerable problems both at the lexical and the syntactic levels.

3. RESULTS

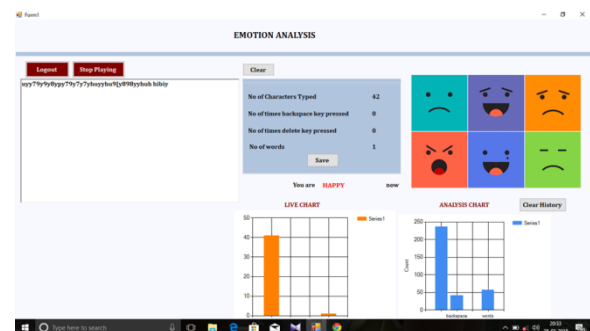


Fig 8.2 Text editor showing current emotion

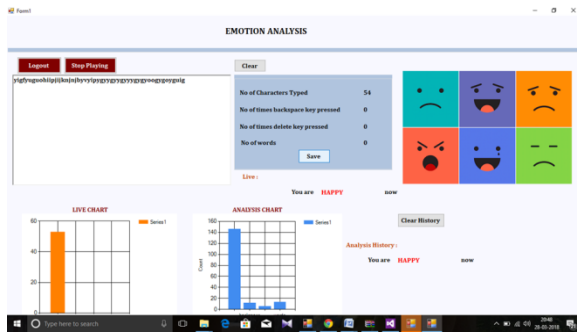


Fig 8.3 Saved history emotional analysis and current emotion

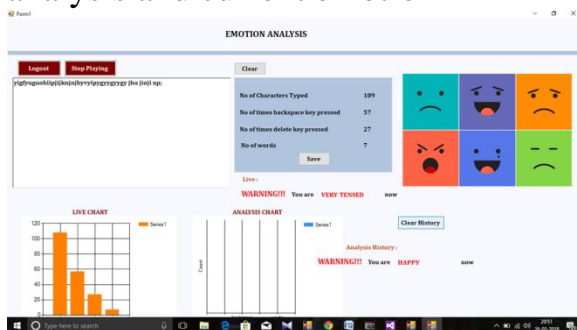


Fig 8.4 History cleared and the starting new data storage

4.CONCLUSION

Classification is very essential to organise data, retrieve information correctly and swiftly. Implementing machine learning to classify data is not easy given the huge amount of heterogeneous data that's present in the web. Text categorization algorithm depends entirely on the accuracy of the training data set for building its decision trees. The text categorization algorithm learns by supervision. It has to be shown what instances have what results. Due to this text categorization algorithm, it cannot be successfully classify documents in the web. The data in the web is unpredictable, volatile and most of it lacks Meta data.

The way forward for information retrieval in the web, in the future opinion would be to advocate the creation of a semantic web where algorithms which are

unsupervised and reinforcement learners are used to classify and retrieve data.

Thus the thesis explains the trends, threads and process of the text categorization algorithm which was implemented for finding the sensitive data analysis

5.FUTURE WORK

Inductive learning algorithms have been suggested as alternatives to knowledge acquisition for expert systems. However, the application of machine learning algorithms often involves a number of subsidiary tasks to be performed as well as algorithm execution itself. It is important to help the domain expert manipulate his or her data so they are suitable for a specific algorithm, and subsequently to assess the algorithm results. These activities are often called pre processing and post processing.

The future enhancement discusses issues related to the application of the text categorization algorithm, an important representative of the inductive learning family. A prototype workbench which has been developed to provide an integrated approach to the application of text categorization is presented. The design rationale and the potential use of the system are justified. Finally, future directions and further enhancements of the workbench are discussed.

- Can implement for web based application
- Handshakes with inductive learning algorithm
- Improvisations can be done in the performance evaluation
- Prediction can be done for all kind of diseases
- In case of huge range of data set, data load balancing can be done

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