Predict User Mood According to Facebook Postings

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Declaration

I hereby declare that this project report entitled “Predict User Mood According to Facebook postings” contains my own work and has not been submitted and will not be submitted in any form for another degree or diploma at any university or other institution of tertiary education. Information derived from the published or unpublished work of others has been acknowledged in the text and a list of references is given.

Name of Student: S.R.T.B.Samaraweera

Signature of Student:

Date:

Supervised by

Name of Supervisor:

Signature of Supervisor:

Date:

Dedication

I would like to dedicate my project “Predict User Mood According to Facebook Postings”,

To my project supervisor Mrs. GTI Karunarathne,

To the Instructors of Faculty of Information Technology at the University of Moratuwa who have supported me to make a success of this project.

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Abstract

We live in an era where communication is growing fast in the cyberspace. As a part of this people tend to be online 24 hours of a day and they write postings in social media. The interesting point is people may put a social mask to hide their feelings in the real world, but they reveal it on their post unknowingly. With this context discussion regarding opinion, mining has dominated research in recent years. Because of the ambiguity of human language, it is difficult to extract the sentiment precisely. Using appropriate machine learning approaches this paper explores to extract the polarity of the postings and predict the mood of a user accordingly. It could use to manage, communicate and collaborate with people more effectively and to manage own personal well-being and happiness. This study applies sentiment analysis for analyzing the hidden information present in the text on social media postings. It is an application of Natural Language Processing. In order to perform Sentiment analysis, need to identify the subjective and objective in the text. Because only the subjective text describes the sentimental information. Then the subjective text is preprocessing using various text preprocessing methods to extract the features. Text preprocessing may include stop word removal, stemming, tokenization, conjunction handling, and negation handling. After performing sentiment classification sentiment polarity can be extracted. To achieve this study uses the lexicon sentiment analysis process. Next, for sentiment classification, machine learning approaches can be used. It is an automatic classification technique and classification is performed using text features. The study uses supervised learning techniques. Using predefined emotion classes and sentiment polarity classifier is built accordingly.

Keywords - Natural language processing, Text preprocessing, Sentiment Analysis, Supervised learning.

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