NANYANG TECHNOLOGICAL UNIVERSITY

URECA
Undergraduate Research Experience on CAmpus

Category: 4
School of Computer Engineering

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Project ID: SCE12068

Sentiment Analysis using Natural Language Processing and Machine learning

Objective

- Be able to automatically classify reviews of various services as positive, neutral or negative
- Achieve high accuracy, recall and F1 score

Motivation

- Current techniques are not very accurate
- Finding the perfect solution is impossible, so there is always scope for improvement in any existing solution

Problems

- Many solutions exist, but nothing is directly applicable
- For the sub-problems, there are many algorithms, techniques and data available
- The challenge is to choose the solution that will have the maximum positive impact on the overall system

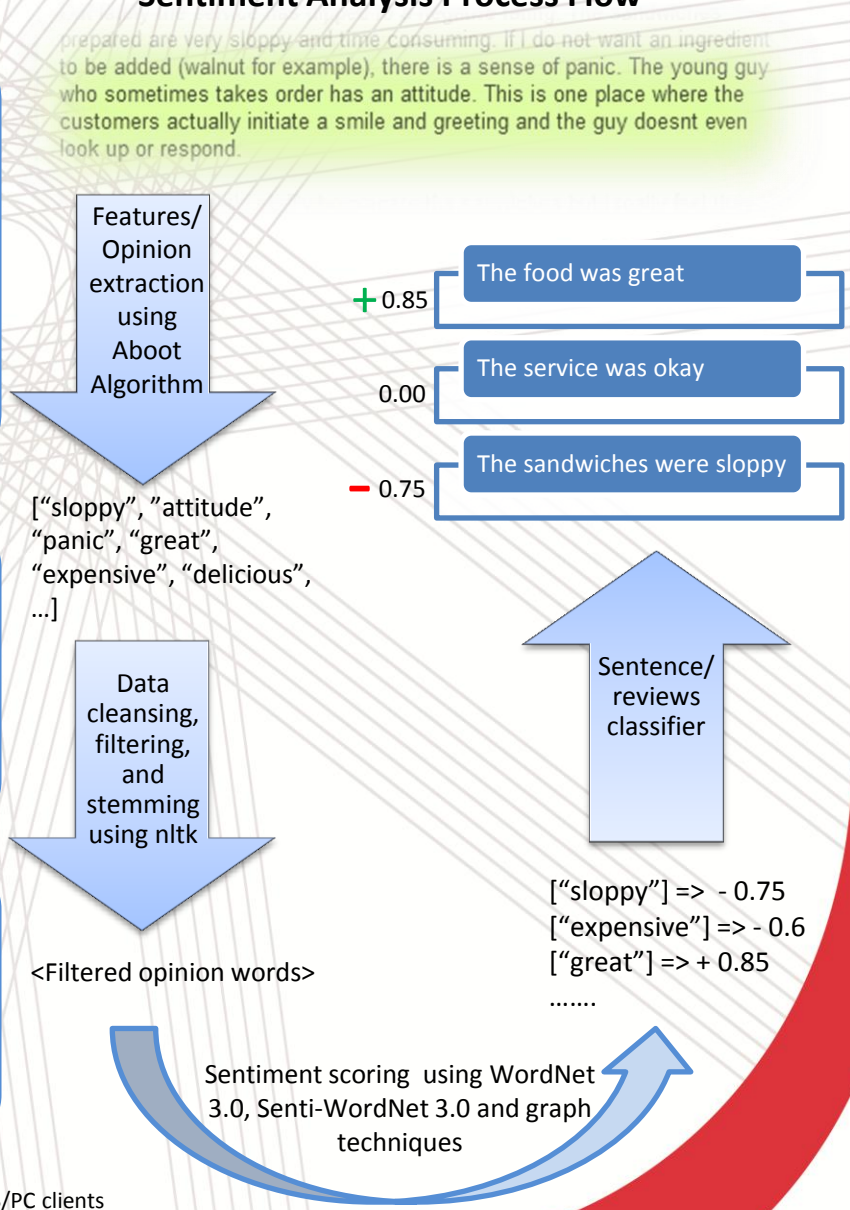
Observations

- The current system has very low accuracy, especially for negative reviews
- The proposed system on the right has to be implemented, refined and tested

Future Work

- Experimentation and research till the optimal amount of accuracy is achieved
- Extensive testing using a variety of real data sets

Sentiment Analysis Process Flow



Project Title: ROSE - RESTFUL Services for Android/IOS/PC clients
Supervisor: Asst Prof Chang Kuiyu
Co-supervisor/Collaborators: None