P.U.R.E. Research Plan Form

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Fall 2014 Research Plan

1.) Write a brief outline of your research plan:
The main idea of the project is detecting controversy in news articles by leveraging online comments and tweets. A method is already implemented for scoring sentences based on the likelihood of being controversial.
The next step would be to develop a method that exploits the sentence-level scoring function to calculate a score for an entire document.
The web interface for showcasing the method will also be developed. The system will extract daily news articles and from several online sources, accompanied with relevant posts and tweets, calculate the "controversy score" for each news article and present the "daily controversial news" with tweets and posts that represent both opposing opinions.
The system will also facilitate user feedback. Users will be able to label news articles that found not to be controversial or verify news that are indeed controversial. Such feedback will facilitate an online learning back-end procedure to increase the accuracy of the scoring functions for controversy detection.

2.) What do you hope to learn and achieve by the end of the semester?
By the end of the semester, all of the members in our group will be able to learn basic text mining methods, understand how statistical metrics are used in text mining, how to leverage online social media for new applications, the differences of unsupervised, supervised and online machine learning, as well as develop essential web design capabilities, so as to present our work to a broader audience.

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