

Predicting political flux from emotional Twitter updates

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Predictive analytics on social media has become an important tool and research in the *International Journal of Data Mining, Modelling and Management* looks at how it might be used to extract emotional context

from the information-rich data streams on the micro-blogging platform Twitter.

Satish Srinivasan and Ruchika Chari of the School of Graduate Professional Studies at Penn State Great Valley in Malvern, Pennsylvania and Abhishek Tripathi of the School of Business at The College of New Jersey, in Ewing, U.S., suggest that large-scale data mining might be used not only to trap emotions at the individual user level but across large groups of users.

Training a naïve Bayes multinomial system and using random forest classifiers on different training datasets can be used to extract an emotional classification for tweets related to a [particular topic](#). The team has successfully demonstrated proof of principle using Twitter updates associated with the 2016 US [presidential elections](#). With this approach, they were able to classify Twitter updates, so-called "tweets" according to one of four basic emotion types: anger, happiness, sadness, and surprise. They were then able to portray the flux in the emotional landscape during this disruptive and divisive period of modern American history.

The analysis of this particular data set shows how Twitter users were generally happier with Clinton earlier in the campaign but as election day approached there was a gradual increase in happiness with Trump's candidature and a dwindling of "surprise" associated with the details of his campaign. The result, of course, is history, but the algorithms wielded by the team corroborate the reality we saw and, of course, may well be applied to a future scenario to make predictions about an outcome based on the classified emotions inherent in Twitter updates pertaining to that scenario.

More information: Satish M. Srinivasan et al, Modelling and visualising emotions in Twitter feeds, *International Journal of Data*

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