Web App Analyzes Tweets in Real Time for a Record of Historic Events

By Joann Pan Feb 17, 2012

If you've tweeted a lot about the Occupy movement, the Syrian Protests or the Egyptian Revolution, Twitris may have considered what you said and recorded it.

Dr. Amit P. Sheth, director of the Kno.e.sis Center in Dayton, Ohio, developed the idea for Twitter research when he was monitoring what was happening in India as the Mumbai terrorist attacks unfolded in 2008. Sheth and students at Wright State University built Twitris, a web app that analyzes what's being said on social media about natural disasters as they happen, current events and ongoing national news like the 2012 election.

In addition to providing general sentiments, Twitris also pulls news articles, Wikipedia articles and other Internet data to help readers better understand a particular event.

Related popular topics, hashtags, users and multimedia content — images and video — are collected on an interface that acts like a time capsule. Older events are archived, but searches for popular users, hashtags, places and sentiment analysis are available for further research or curiosity.

About 46.5 million tweets from 4.7 million Twitter users have been processed. From the Occupy Wall Street events, about 4.1 million tweets were collected, so far.

To get the most accurate sentiments report, the team also incorporated slang and online urban dictionaries to hone in on Twitter sarcasm.

"For media, it provides [an] excellent opportunity to summarize [an] event, as well as monitor the evolution of the event from multiple dimensions," Sheth said.

Twitris has analyzed 40 events including the Iran Election in 2009, Haiti Earthquake in 2010 and Occupy Wall Street starting at the end of 2011.

While the media gives an overarching account of events, said the Twitris development team, Twitris provides a deeper picture by summarizing social media data and by collecting news and multimedia.

For now, the team decides which events to follow. All tweets are collected automatically by the system by scanning Twitter's streaming API, according to Dr. Sheth.

In the future, the team hopes to make a system with more search options. Election 2012 coverage on Twitris will debut in the next few weeks.

Are you curious to see what the world is saying about a particular event? Will you use Twitris? Tell us in the comments.

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