# Microsoft Research project visualizes viral content (w/ video)

March 6 2013, by Nancy Owano

(Phys.org) —Trees, time lines, and bubbles. All in a day's work for a new research project at Microsoft called ViralSearch, a Microsoft Research project tool that follows the journeys of viral content. This week, Microsoft Research revealed its ViralSearch project which involves analysis to understand how-viewed content on Twitter happens to go viral. The project was introduced at a research show-and tell event. That event was Microsoft's annual TechFest, where researchers demonstrate the projects they have been working on.

ViralSearch was presented as a way to analyze content movements via Twitter. The fundamental question the project seeks to trace is, what makes some content go viral? Microsoft's ViralSearch has so far replaced mystique with methodology, as it has gone through almost a billion pieces of information on news, videos, and photos occurring on Twitter in order to quantify viral content. As such, ViralSearch has the potential to make progress within a metrics-hungry field, as data researchers look for better insights into Internet behavior.

ViralSearch can navigate and explore how content spreads across social media and how some of that content ends up as viral. ViralSearch looks at story propogation and also provides a search of the influential persons that help propel content into going viral. Researcher Jake Hofman, a computational social scientist, did the project presentation. His area of research involves applying statistics and machine learning toward social data. "ViralSearch is a new means of navigating and exploring content that goes over social media," he stated.

"We've gone through hundreds of thousands of stories that were recently posted on Twitter, looked at millions of mentions of these stories, and reconstructed trees of how these things pass from one individual to the next."

He showed how a story about Jeremy Lin was re-posted in a traditional media style of popular content traveling, where a number of people following a big outlet re-post the story and it does not go much further than that. In contrast, a viral video of a band was identified.

The project has used a scoring method to distinguish something viral from something that is merely popular.

ViralSearch currently uses Twitter as a source for all its data, tracking and visualizing how content spreads. In the bigger picture, the project

belongs to an emerging research field that is attractive to software industry giants, and that is computational social science, which makes use of large-scale demographic, behavioral and network data. As Microsoft pointed out, with so much information available, from buying patterns to human contacts, "we are able to measure human behavior with precision largely thought impossible just a decade ago, creating an unprecedented opportunity to address longstanding questions in the social sciences." Microsoft described computational social science as "lying at the intersection of computer science, statistics and the social sciences."

A marketer's dream and a private citizen's nightmare? Whatever the opinion, the tools involved as presented by Hofman are impressive and promise a better understanding of content that goes viral and the impact of certain people on making content go viral.