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An Interactive Visual Analysis Method for Dynamic Exploration of Streaming Textual Information

Disclosure Number

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Technology Summary

The invention relates to social media sources and more specifically to systems and methods for analyzing information in real time. The scale, velocity, and dynamic nature of large scale social media systems like Twitter demand a new set of visual analytics techniques that support near real-time situational awareness. Social media systems are credited with escalating social protest during recent large scale riots. Virtual communities form rapidly in these online systems, and they occasionally foster violence and unrest which is conveyed in the users' language. Techniques for analyzing broad trends over these networks or reconstructing conversations within small groups have been demonstrated in recent years, but state-of-the-art tools are inadequate at supporting near real-time analysis of these high throughput streams of textual information. Our method offers an interactive visual analysis environment to explore these virtual networks, as well as detect sentiment, highlight change, and discover spatio-temporal patterns.

Inventor

STEED, CHAD A

Computational Sciences & Engineering Div

Licensing Contact

SIMS, DAVID L

Rm 124C, Bldg 4500N

1 Bethel Valley Road 6196

Oak Ridge, TN 37831

Office Phone: (865) 241-3808

E-Mail: SIMSDL@ORNL.GOV

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