An Investigation of the Propagation of Error-Resistant and Error-Prone Messages Over Large-Scale Information Networks

Challenge:

- What content-, metadata-related characteristics make certain messages more or less error-resistant or error-prone than others?
- How inaccurate messages are propagated over large-scale information networks in crisis situations?

Scientific Impact:

Focus on developing strategies, involving graph-based modeling, sentiment-based coding, and shingle- and user-based metrics for countering misinformation:

- Technology to support information extraction techniques that are resilient to noise and volume of microblog data

Solution:

- Design models that accurately identify error detection and propagation on an information network
- Analyze misinformation resisting and supporting characteristics to help develop information anti-bodies for the purpose of coping.

Broader Impact:

The scope of this work spans individual/social behavior and computer science/distributed systems.

Outreach efforts:

- To underrepresented student population (USF and UTSA).
- Via presentation at selected conferences and journals

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