Delta Computing & Engineering Colloquium

Hosted by the College of Science & Computer Engineering

Monday, October 23, 2017

Delta 241, 11:30 a.m. – 12:30 p.m.

Crisis Communication and Rumor Management using Social Media during Disasters

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Social media has been more and more used by government and nongovernment organizations, and private citizens for crisis communication during disasters. However, few research has studied the users' behavior when facing rumors and debunking information. In this research, we first study the effectiveness of crisis communication and how retweet and mention could help improve crisis information impression. Millions of tweets posted during Hurricane Sandy in 2012 are collected and analyzed. Second, we investigate four cases of rumor responding and debunking behaviors of Twitter users during Hurricane Sandy in 2012 and Boston Marathon bombings in 2013. We find that for users who were misinformed and reacted by posting tweet(s), they could respond to this rumor by: spreading (~86%), seeking confirmation (~9%), or doubting (~10%). Given rumor spreading users were debunked, they would respond by: deleting rumor tweets (~10%), clarifying rumor information with a new tweet (~19%), or doing nothing (~78%). Finally, we discuss the optimal debunking strategies dealing with potential rumor information, and the corresponding consequences on the downstream information sharing. We also use simulation to study the impact of different network information flow structure. This research provides some novel insights on crisis communication and rumor management using social media during disasters.

Host: Dr. Gene Shan

Refreshments will be served from 11:00 a.m. – 11:30 a.m!

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Any person needing an accommodation for a disability to participate in this program should contact the sponsoring organization at (281) 283-3770 for necessary arrangements.