

Using social network data to track information and make decisions during a crisis

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Problem

- During a crisis, social networks may contain more up-to-date information than official sources.
- How can we automatically process this data to make it useful?

Objective

- Extract useful information from the data
- Determine likelihood of information to be true or false
- Change “known” information (i.e. current world view) in real time as new data is analyzed

Methods

1. Keyword analysis based on crisis details e.g.
 1. Type
 2. Location
2. Pattern analysis
 1. Uncommon word combinations being used commonly
 2. Questions add little data
3. Weighing information based on frequency
 1. More instances = higher weight = higher likelihood that information is true

Challenges

- Constant stream of data
- Understanding the informal and ambiguous language commonly used on social networks
- Noisy data e.g. posts that don't add to the world view

Future Work

- Remove data that doesn't contribute to the world view
- Distinguish rumors and eliminate them from the world view

