The Center for Education and Research in Information Assurance and Security

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

<u>Methods</u>

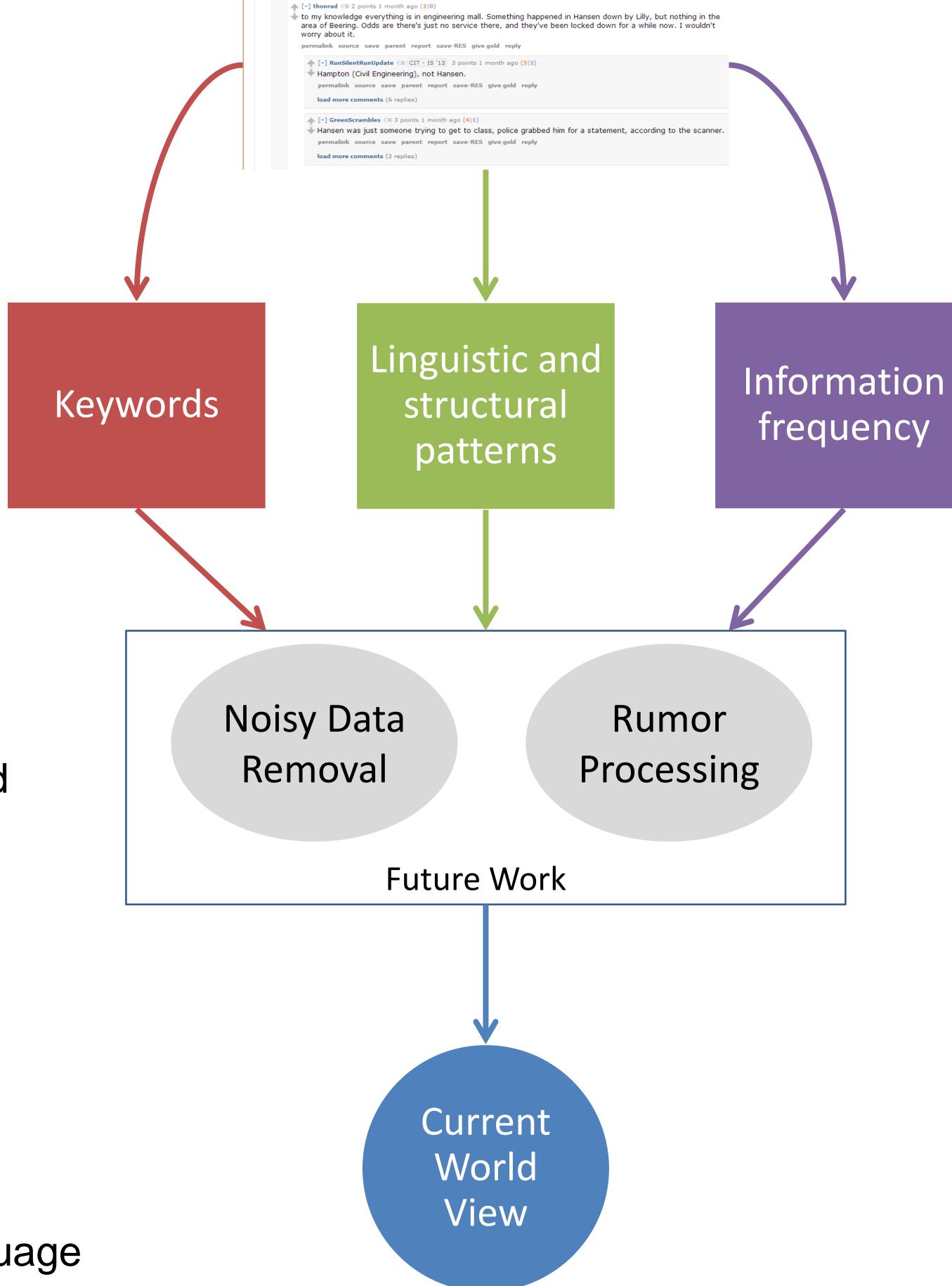
- 1. Keyword analysis based on crisis details e.g.
 - 1. Type
 - 2. Location
- 2. Pattern analysis
 - 1. Uncommon word combinations being used commonly
 - 2. Questions add little data
- 3. Weighing information based on frequency
 - 1. More instances = higher weight = higher likelihood that information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



🦤 I've got a friend in Bearing that I can't get a hold of. Is there anything happening in that area as well?

