CS 4803 Social Computing: Trust

Munmun De Choudhury
munmund@gatech.edu
Week 10 | October 21, 2014
A Photo Of A Woman In A Homemade Hazmat Suit At The Airport Has Gone Viral

The passenger in the viral picture was seen at Dulles Airport in Washington, D.C., where U.S. Ebola victim Thomas Eric Duncan had a layover.

posted on Oct. 19, 2014, at 4:30 p.m.

Rachel Zarrell
BuzzFeed Staff
A Photo of a Hazmat Suit Gone Viral

The passenger in the hazmat suit at the airport where U.S. Ebola patient Thomas Eric Duncan was flown...

posted on Oct. 19, 2014, at 4:22 p.m.

Rachel Zarrella
BuzzFeed Staff
Trust Breaks Down in Electronic Contexts but Can Be Repaired by Some Initial F2F Contact
Summary

• The paper examines trust emergence in online contexts – one of the early works in this space (aka 1998).

• Experimental approach

  » Groups of size six people were constructed, who met 3-5 times a week in a laboratory setting – there were 12 groups in all

  » Main task was monetary investment in a market. The economic model was that of “social dilemma”.

  » Email lists, supporting text based communication were used as the electronic communication tool

• Main finding – in the context of groupware technologies, a prior F2F meeting facilitated trust building in later electronic communication
Twitter Under Crisis: Can We Trust What We RT?
Summary

• The article examines use of Twitter in the context of a large disaster, the Chilean earthquake of 2010.

• Crisis tweets contain less diversity in their vocabulary usage, and are bursty in nature.

• Main finding – the propagation pattern of rumors are different from that of legit news, since rumors tend to be questioned more by the Twitter audience.
  – Rumors also lead to chaos, in the absence of verifiable information from traditional sources

• Hand curated set of confirmed truths and baseline rumors.
### Summary

<table>
<thead>
<tr>
<th>Case</th>
<th># of unique tweets</th>
<th>% of re-tweets</th>
<th># of unique “affirms”</th>
<th># of unique “denies”</th>
<th># of unique “questions”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Confirmed truths</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The international airport of Santiago is closed</td>
<td>301</td>
<td>81</td>
<td>291</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>The Viña del Mar International Song Festival is canceled</td>
<td>261</td>
<td>57</td>
<td>256</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Fire in the Chemistry Faculty at the University of Concepción</td>
<td>42</td>
<td>49</td>
<td>38</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Navy acknowledges mistake informing about tsunami warning</td>
<td>135</td>
<td>30</td>
<td>124</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Small aircraft with six people crashes near Concepción</td>
<td>129</td>
<td>82</td>
<td>125</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Looting of supermarket in Concepción</td>
<td>160</td>
<td>44</td>
<td>149</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Tsunami in Iloca and Duao towns</td>
<td>153</td>
<td>32</td>
<td>140</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1181</td>
<td>1123</td>
<td>4</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td>168,71</td>
<td>160,43</td>
<td>0,57</td>
<td>4,29</td>
<td></td>
</tr>
<tr>
<td><strong>False rumors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Death of artist Ricardo Arjona</td>
<td>50</td>
<td>37</td>
<td>24</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Tsunami warning in Valparaiso</td>
<td>700</td>
<td>4</td>
<td>45</td>
<td>605</td>
<td>27</td>
</tr>
<tr>
<td>Large water tower broken in Rancagua</td>
<td>126</td>
<td>43</td>
<td>62</td>
<td>38</td>
<td>20</td>
</tr>
<tr>
<td>Cousin of football player Gary Medel is a victim</td>
<td>94</td>
<td>4</td>
<td>44</td>
<td>34</td>
<td>2</td>
</tr>
<tr>
<td>Looting in some districts in Santiago</td>
<td>250</td>
<td>37</td>
<td>218</td>
<td>2</td>
<td>20</td>
</tr>
<tr>
<td>“Huascar” vessel missing in Talcahuano</td>
<td>234</td>
<td>36</td>
<td>54</td>
<td>66</td>
<td>63</td>
</tr>
<tr>
<td>Villarrica volcano has become active</td>
<td>228</td>
<td>21</td>
<td>55</td>
<td>79</td>
<td>76</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>1682</td>
<td>502</td>
<td>836</td>
<td>216</td>
<td></td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td>240,29</td>
<td>71,71</td>
<td>119,43</td>
<td>30,86</td>
<td></td>
</tr>
</tbody>
</table>
Your Reflections...
Your Reflections...

Cite one social media experience which questioned your trust in a system, some information, a person.
The basic premise of the first paper (Rocco et al) is that people face challenges in collaborative tasks involving electronic communication, because of risks deceitful behaviors. Is it less prevalent 16 years later?
The experimental setup by Rocco et al. used the social dilemma model of economic investment. Could that have naturally lead participants to be suspicious of each other?
Would today’s groupware tools like Skype, Google hangouts etc. help curb this mistrust perception observed by Rocco et al?
To what extent identity is important for building trust. Does anonymity naturally indicate lowered trust in networks?
If historical data on a user’s SNS activity can be considered, how can this improve trust inference in networks?
Trust can be contextual and often times unlikely to be binary, rather continuous. How can user rating based methods scale to this observation?
Could Reddit’s link or comment karma be useful to infer trust? How would you use it? What are its limitations? What about forms of reputation systems – can they be used as a proxy for trust?
On Facebook and Twitter, users can’t assign trust scores to others, except Facebook’s “like” feature. Could the “like” feature be used for trust inference in any way?
On Twitter, what cues would you use to infer trust?
Mendoza et al study veracity of information related to a crisis event. Would the findings vary if it were not related to a crisis?
More questioning around a topic may also be because the topic is controversial. It doesn’t necessarily mean it is a rumor. How can we distinguish between these two cases?
Safety Check
Connect with friends and loved ones during a disaster.

The Menlo Park Earthquake
SAFETY CHECK

You appear to be in the area affected by the Menlo Park Earthquake.

Are you safe?
I'm safe
I'm not in the area

Peter Cottle
You say you're in the affected area.
Comment - 1