



Student Name: Ibrahim fuad alturki

ID#: 3702339

Date: 13 /04 /2020

Title : Predicting tie strength with social media

Author(s) : Eric gilbert and karri karahalios

Document Date : 2009 Proceeding

What is the main problem discussed in this paper?

Tie strength in social media

illustrating how modelling tie strength can improve social media design elements

What is the main related studies that worked on this problem?

Adamic, L. A. and Adar, E. 2003. Friends and neighbors on the Web. *Social Networks*, 25(3), 211–230.

Albert, R. and Barabási, A. L. 2002. Statistical Mechanics of Complex Networks. *Reviews of Modern Physics*, 74(1).

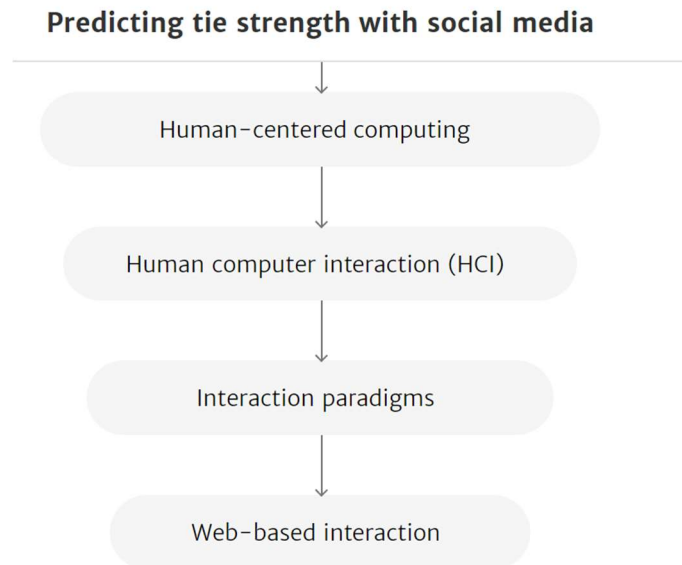
Bernard, H. R., Killworth, P., et al. 1984. The Problem of Informant Accuracy: The Validity of Retrospective Data. *Annual Review of Anthropology*, 13, 495–517.

What are the dataset(s) used in this study?

The model builds on a dataset of over 2,000 social media ties and performs quite well, distinguishing between strong and weak ties with over 85% accuracy

What are the approach/model proposed in the paper?

present a predictive model that maps social media data to tie strength



How the authors evaluated the performance of the methods used in this paper?

That its showed a very good outcomes because they tried a different ways to test the out come from taking a different sensitive information to take the random facebook user information .

Reflection: What have I learnt?

That we can take similar information from different people by using data science we can match similarities and that paper from 2009 so I think it's more complicated now but this is amazing to read and see how they can manage to suggest people that they never met with people with same similarities of many groups with accuracy with 85%.

Study link

<https://dl.acm.org/doi/pdf/10.1145/1518701.1518736>

Paper #2

Title: Social Media Text Mining and Network Analysis for Decision Support in Natural Crisis Management

Author(s): Zielinski, Andrea Middleton, Stuart E

Document Date : 2013

1) What is the main problem discussed in this paper?

An issue in crisis management is to extract from the mass of incoming information what is important for situational awareness during mass emergencies.

2) What is the main related studies that worked on this problem?

large amount of first-sight collaborative information available online, early situational awareness is now feasible through sophisticated processing of online social media sources. A 2008 earthquake in China was perhaps the first to be analysed in this way, with Li and Rao (2010) reporting a manual analysis of the Twitter response time & accuracy of the messages. Microblogs have been investigated further for Earthquake event detection in Japan (Sakaki, Okazaki, and Matsuo, 2010).

3) What are the dataset(s) used in this study?

Dataset 1 - Tsunami in Philippine's 31/08/2012. [12:47:32.0 UTC + 7 hours]. Initial training was based on hotspots of seismic activity in the Mediterranean Sea during 2012 with tweets predominantly in English, French, Greek, Italian, Turkish. Further analysis uses a real tsunami event, which illustrates the complexity of the MTC task and demonstrates the aspect of multilinguality in tweets. The monitoring process with a keyword list on earthquake-related terms produced a total of 558,126 unique tweets in languages such as English, Spanish, Portuguese, French, Greek, Tagalog, Malay and Indonesian. Dataset 2 - Flooding in New York from storm sandy 29/10/2012. The 'super storm sandy' event has provided a lot (up to 20,000 per day for 'flood' keywords) of English tweets relating to storm damage, flooding, power outages and subsequent inundation effects. This event has excellent media coverage, and there is a lot of ground truth data available from NOAA satellite flood impact assessments through to lists of verified incidents by major media organizations.

4) What are the approach/model proposed in the paper?

Focused Crawling (FC), Trustworthiness Analysis (TA), Multilingual Tweet Classification (MTC), Geo-parsing (GEO)

5) How the authors evaluated the performance of the methods used in this paper?

detailed the integration of four modules from the fields of text mining and network analysis to classify tweets relevant for situational awareness. The multi-lingual analysis TweetComp1 module is our first prototype version deployed for initial evaluation (Zielinski and Bügel, 2012).

6) Reflection: What have I learnt?

That twitter and social media can be a great place to manage crisis by using very big data about the natural crises and it can decide it's a crisis and can tell the people using social media like they used twitter

http://www.eecs.qmul.ac.uk/~laurissa/Laurissas_Pages/Publications_files/ZielinskiAI_IS_CRAM2013.pdf