

HiggsTweet: Analyzing Influence Propagation During a Viral Event on Twitter

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In this project we analyze the influence dynamics within a certain interest-group during a viral event.

1 INTRODUCTION

Analyze the power dynamics in the physics web-community at the time of a viral event.

Q: Which users to influence if we wish to spread scientific misinformation?

2 RELATED WORK

3 PRELIMINARIES

Present IM problem

4 THE DATA SET

Social Network + Action Log

500k users; 14M edges (following/followee); 500k directed, typed actions

5 OUR APPROACH

Combining social network + "action edges" and running community based IM.

5.1 Computing Edge Probabilities

Idea: Use WC probs with different weights for different action-types.

- Hard to validate
- Hard to compare
- Effects of p_{uv} on runtime.
- Effects of p_{uv} on spread.

5.2 Influence Maximization

Greedy, CELF, or MIA? What to do..

Idea: Divide and conquer—preprocess with community detection. Wang (2012)

Gudbrand Tandberg

University of British Colombia

6 RESULTS

7 DISCUSSION

7.1 Future Work

Impact of time.

Content of tweets - sentiment analysis.

Compute p_{uv} using unsupervised learning approach. Perform evaluative analysis.

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