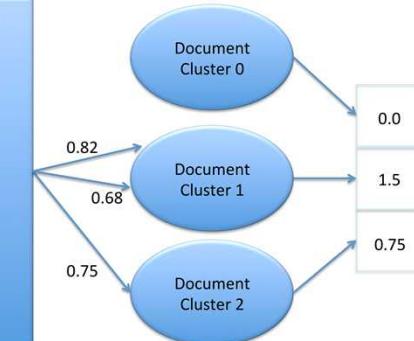
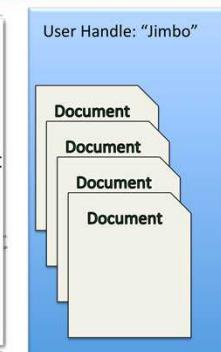
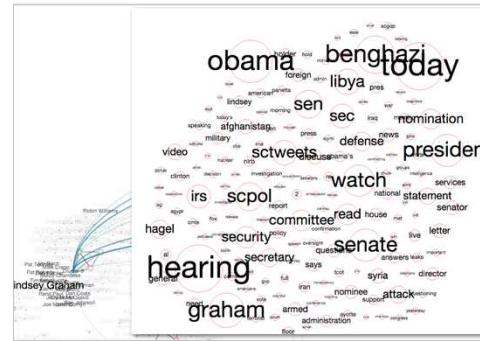
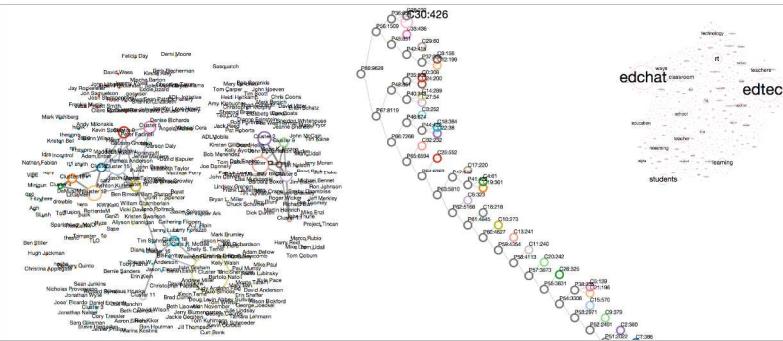


Exceptional service in the national interest



Grandmaster: Interactive text-based analytics of social media

Nathan Fabian, Warren Davis, Elaine M. Raybourn,
Kiran Lakkaraju, Jonathan Whetzel



Motivation

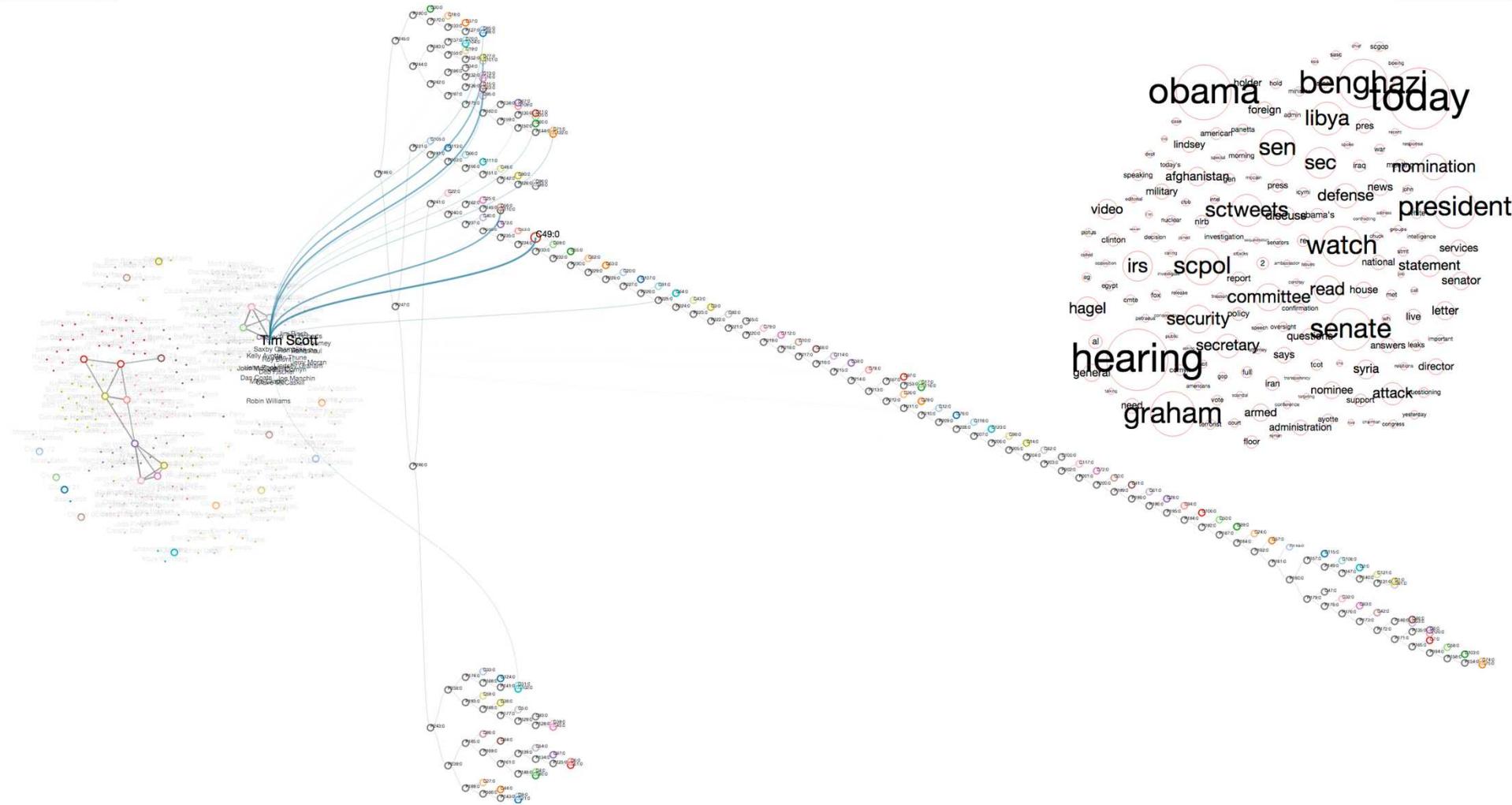


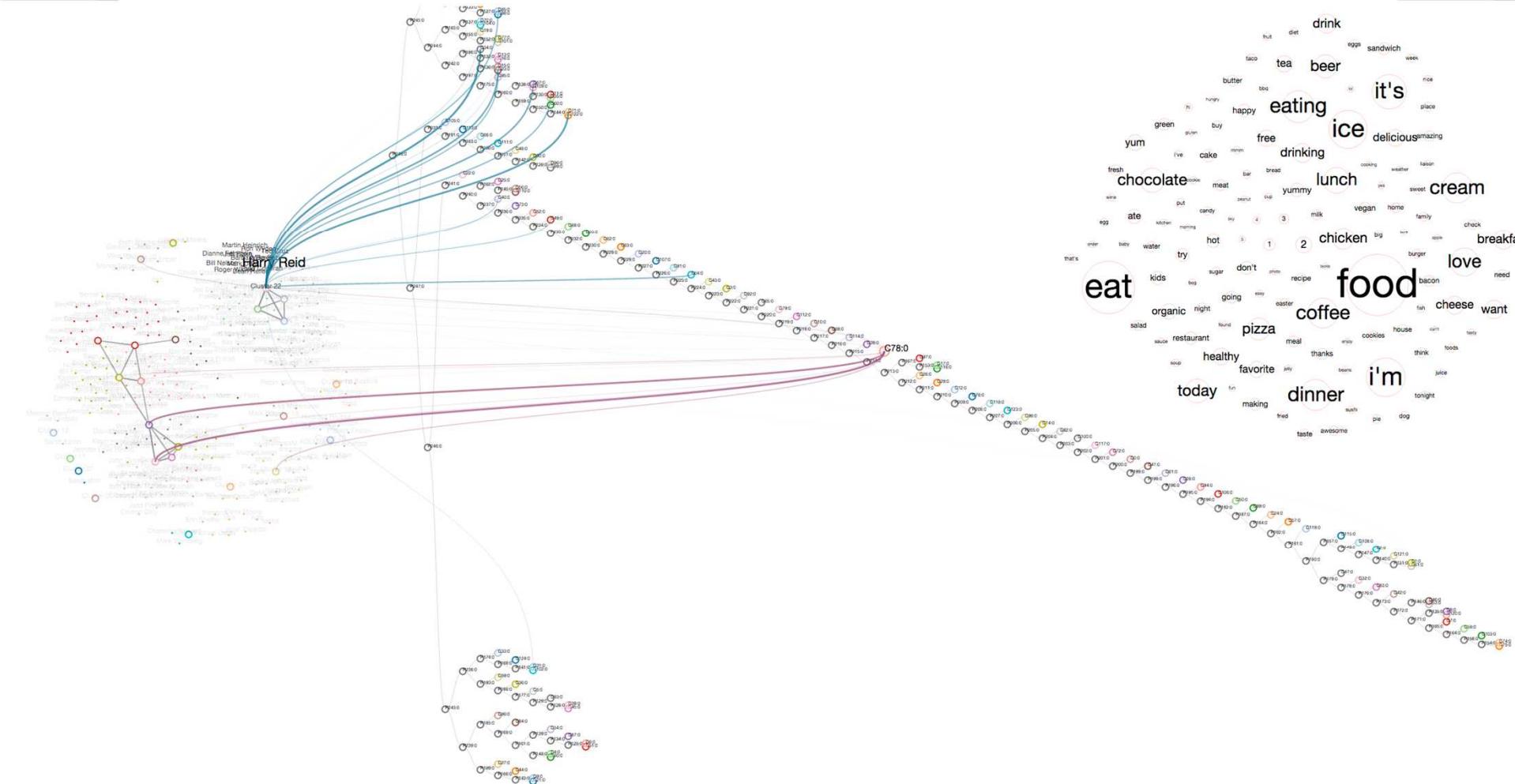
What Is a Digital Footprint? Digital image. Roofing Brand. N.p., n.d. Web. 17 Dec. 2014.

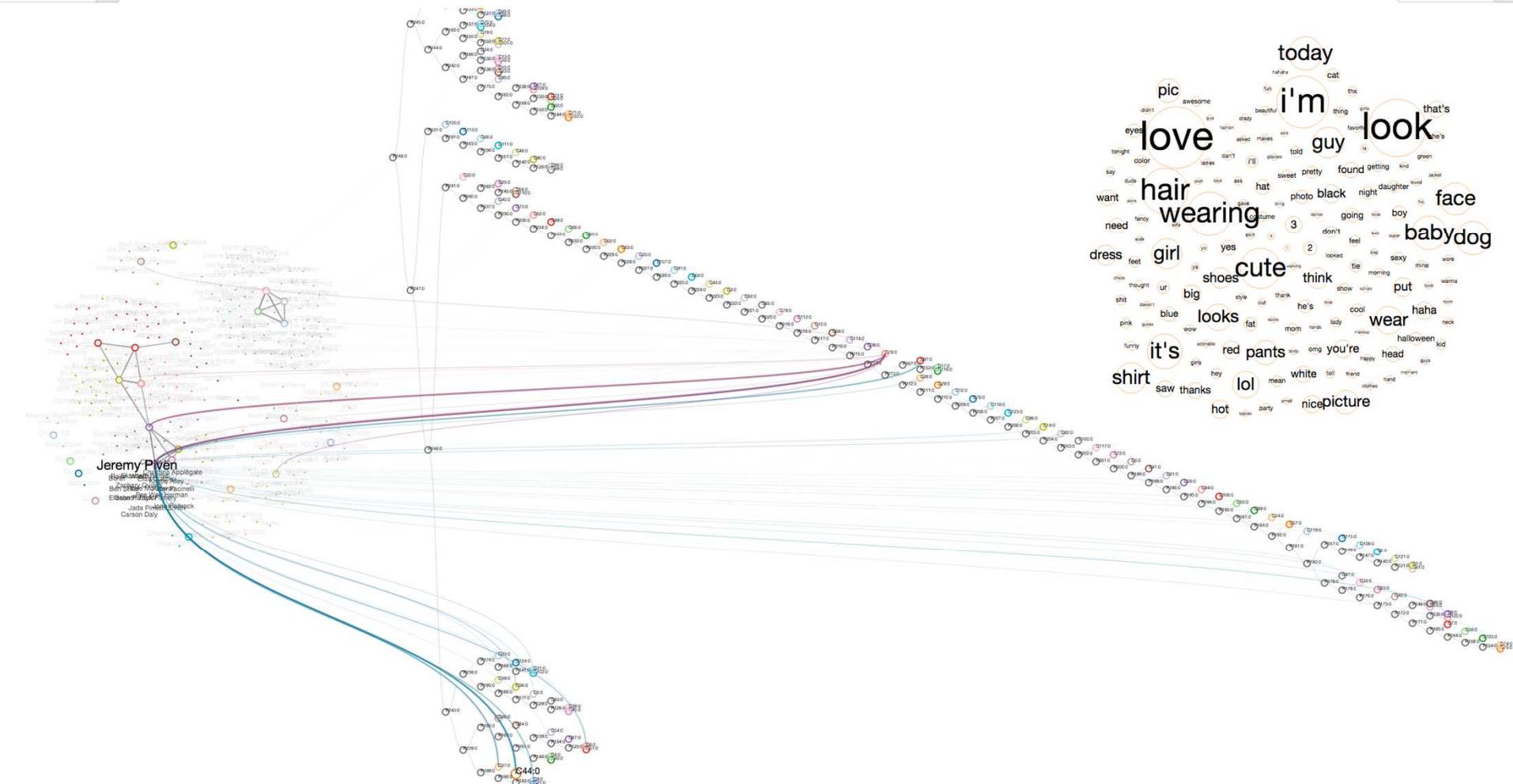
Grandmaster Application



Demo

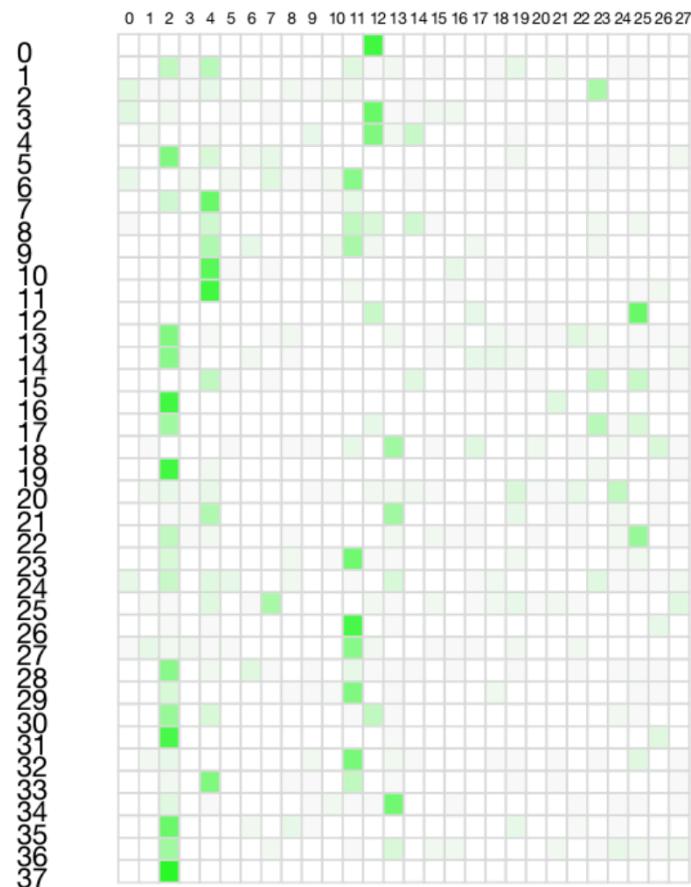
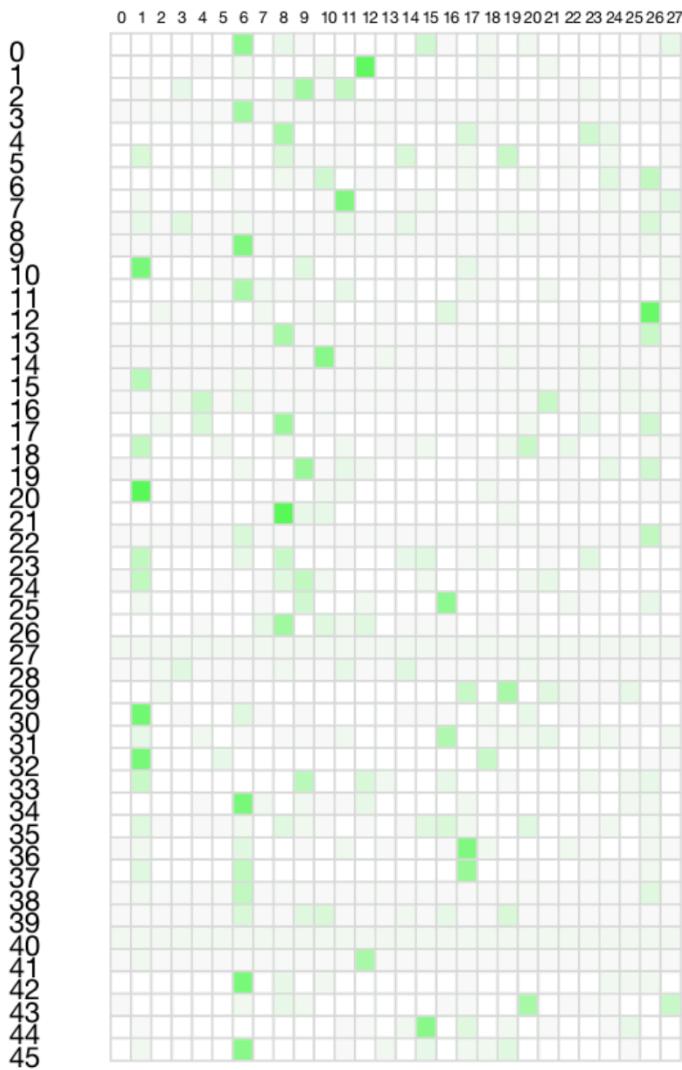


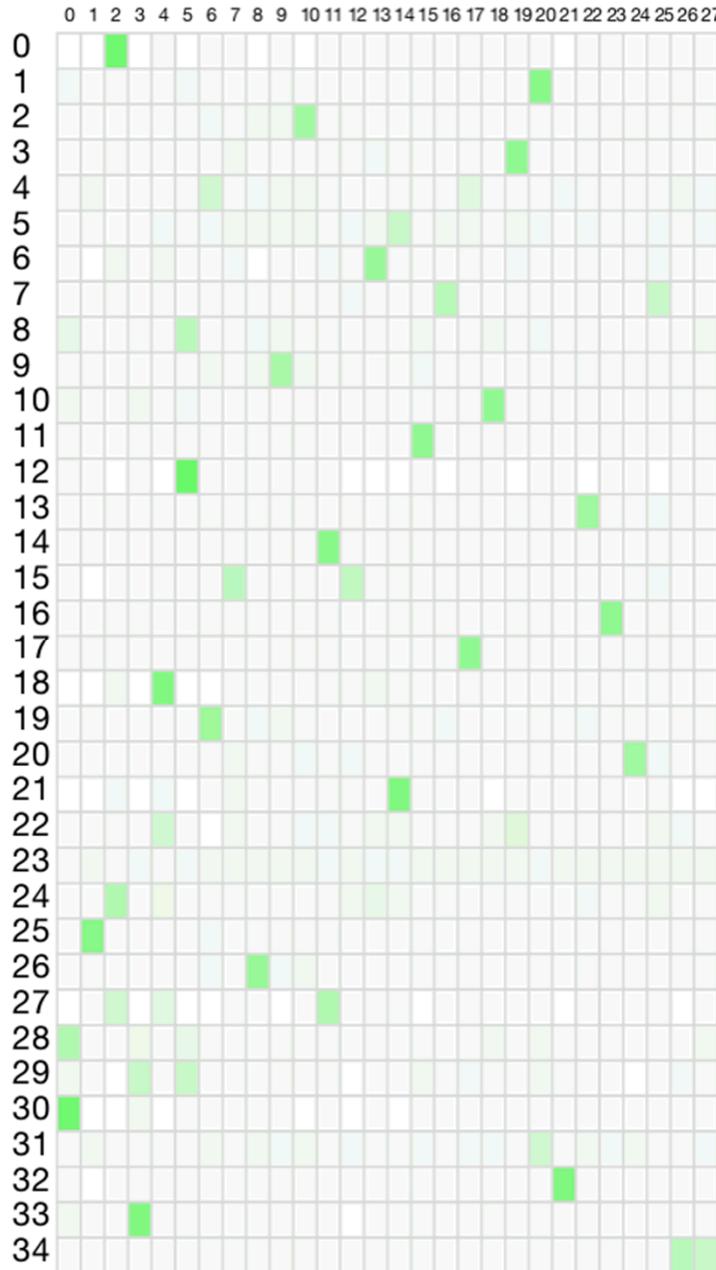


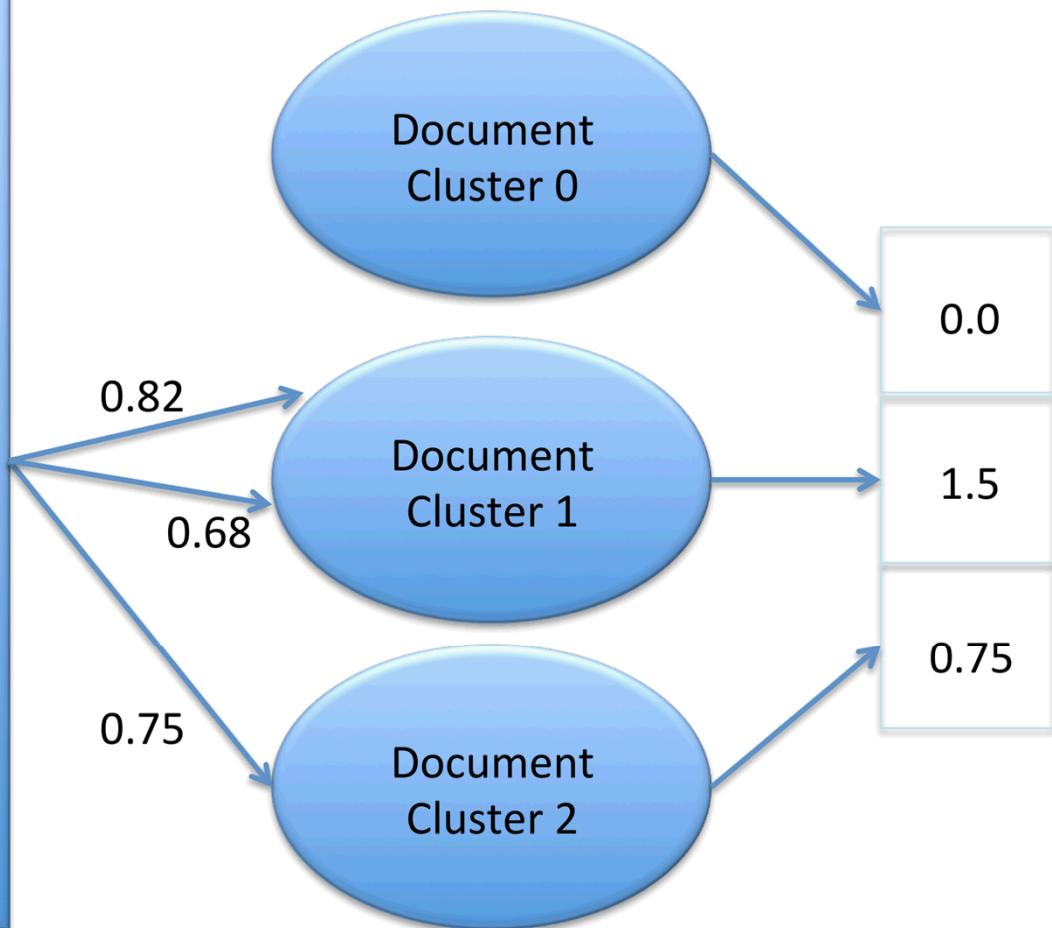
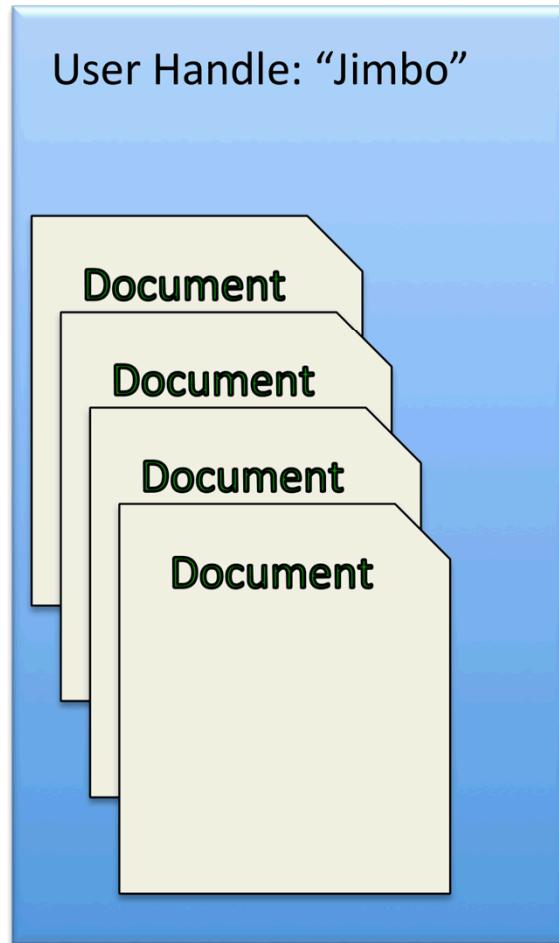


Method

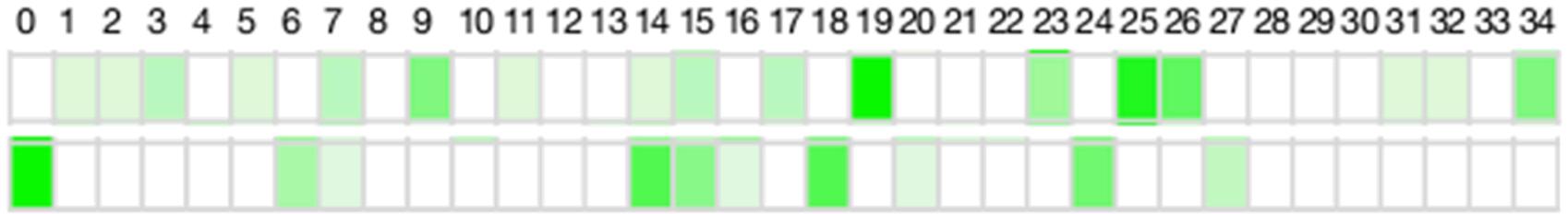
- LDA and cluster documents
- Project people into “document space”
- Cluster projected people



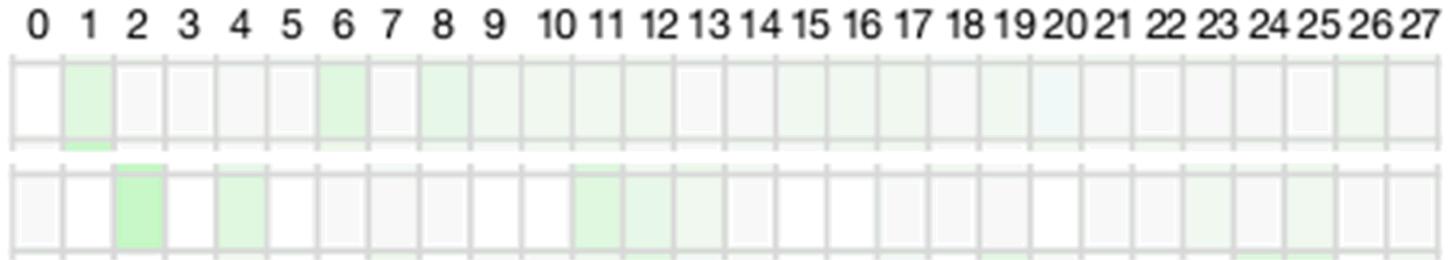




Projected Document Space Vectors



Averaged LDA Document Vectors



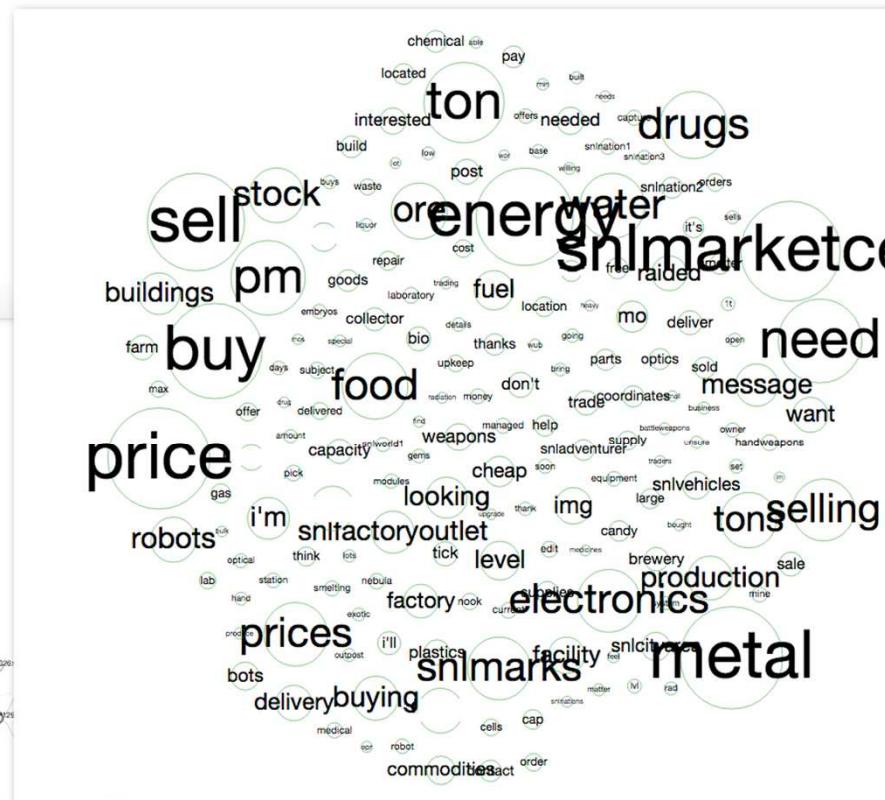
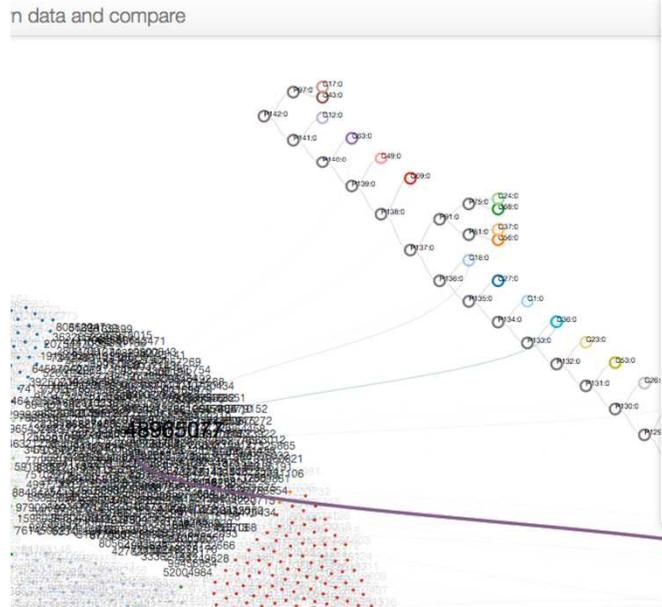
Results

Twitter Numbers

- Twitter data from first tweet up to June 2013.
- 257 Twitter users from four categories
 - Current senators
 - Hollywood celebrities
 - Education Technology Researchers
 - Professional Gamers
- 546,570 tweets
- 100 topics
- 125 document clusters
- 20 user clusters

Forum Numbers

- 3,836 individuals
- 149,921 forum comments



Summary and Future Work

- Provides successful identification of groups
- Some user level information on topics
- Can this info be automated to aid education?

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Questions