Welcome to the Social Media Analytics Summit: Challenges and Opportunities in an Emerging Field

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Social Media Analytics: Opportunities and Challenges

Transformative Progress

• **Listen**, don’t ask
  – Digital social trace data
• **Measure**, don’t estimate
• Consider **structure and content** of social interactions (Lazer et al., Science, 2009)
  – Mixed data & methods: Network Analysis for interaction data, NLP for text data
  – Quantitative & qualitative analysis of big (broad) and thick (deep) data

Critical Challenges

• **Validity** of underlying theories and ontologies?
• Data **quality** at scale?
• **Regulations** for human-centered and/or web-based data?
• **Describe/predict** (methods from stats and computing (ML, NLP, Network Analysis) and **explain** (theories from social sciences, linguistics) (Tiropanis et al. 2015, CACM)

Diesner J (2015) Small Decisions with Big Impact on Data Analytics. *Big Data & Society*, special issue on Assumptions of Sociality. [http://bds.sagepub.com/content/2/2/2053951715617185](http://bds.sagepub.com/content/2/2/2053951715617185)
Research with and on Social Media: Some Current Projects

1. **Impact of Information Products:**
   - What impact do issue-focused information products have on people, groups and society? How can we measure that beyond simple frequency based metrics? (Funder: Ford Foundation, NCSA)

2. **NLP for Building and Enhancing Graph Data and Theory:**
   - How can we use user-generated content to construct, infer and refine network data?

3. **Regulations and Practical Ethics for Working with Human-Centered and Online Data:**
   - How can we be rule compliant and still innovate? (Funder: Midwest Big Data Hub)
It’s a team effort: Interdisciplinary!

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