

SoMe Tools for Social Media Research

By the Social Media Lab at the University of Washington (SoMeLab.net)

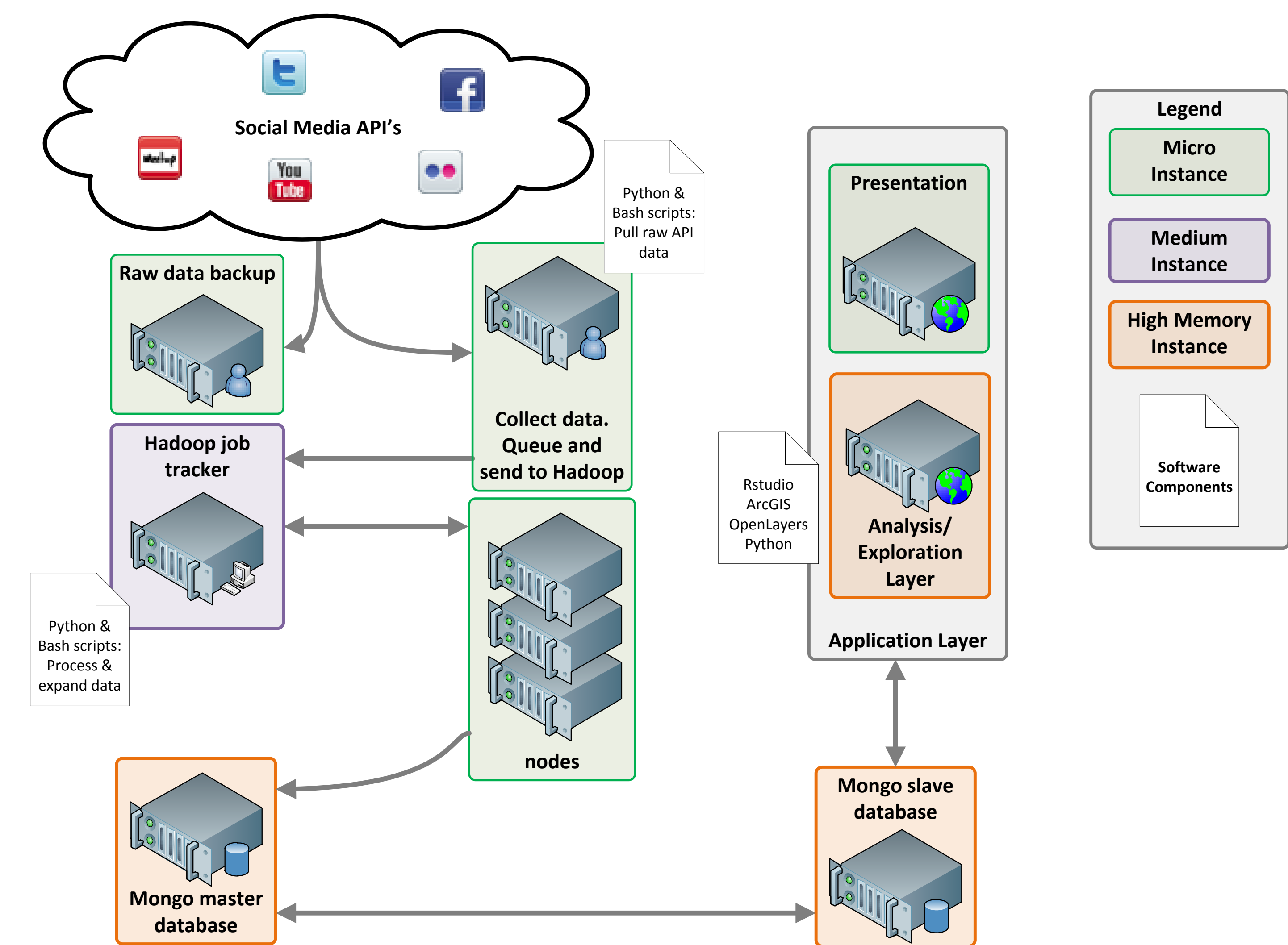
Some Problems:

- Social scientists utilizing the big datasets gathered from social media are faced with unique technical, methodological, and ethical challenges that are often not foregrounded in academic literature.
- Traditional databases and desktop computers are inadequate for the collection, storage, and analysis of larger, more complex social media data sets.
- Technical limitations of research teams for entry into the research.
- Adhering to varying terms of service for each social media platform
- Tying together multiple, complex application programming interfaces (APIs) into a cohesive whole

Some Progress [Technical]

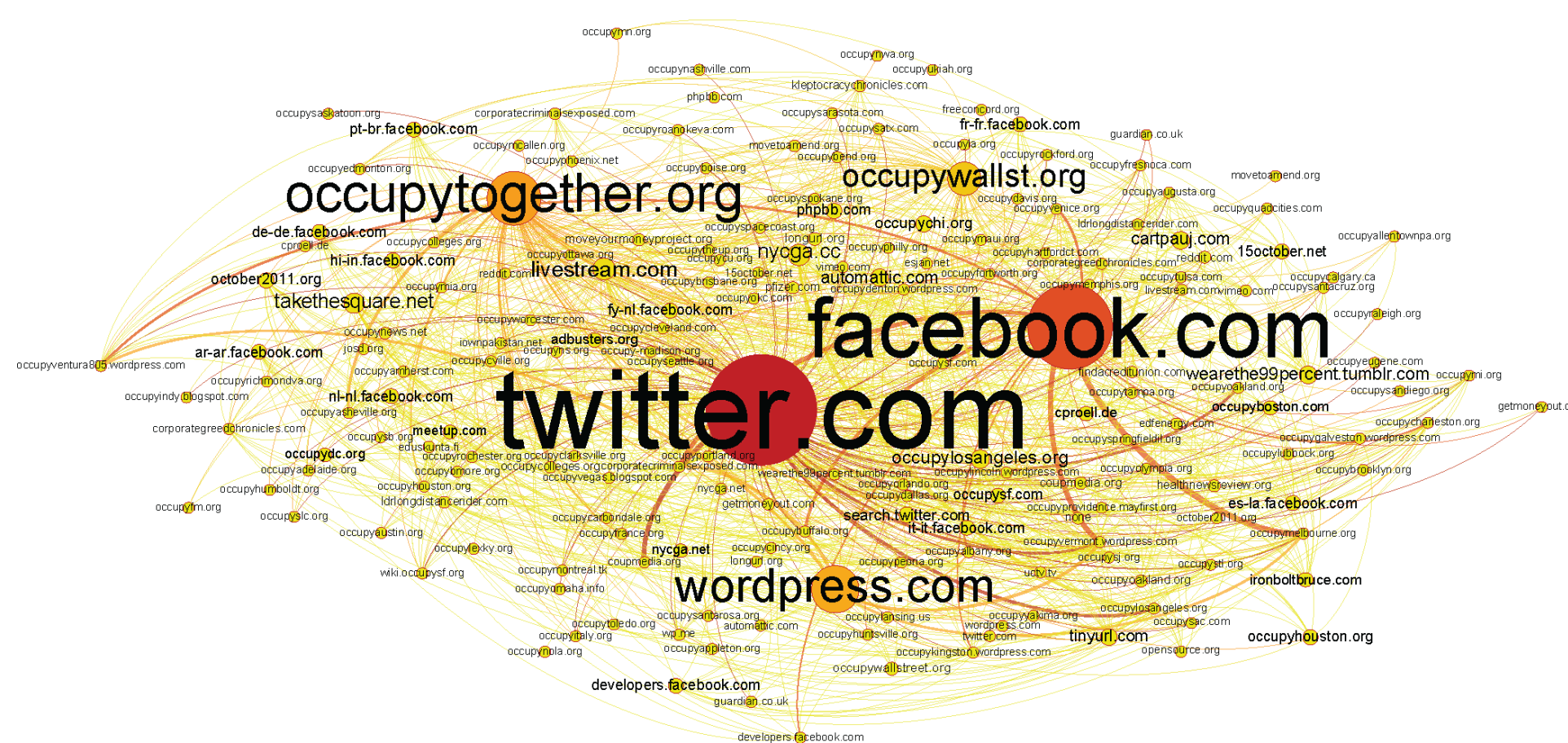
The SoMeLab team is developing a integrated toolkit for researchers that enables:

- Use of open source, low cost components on scalable platforms (see diagram at right)
- One-click installation of the toolkit to your own system
- Simple data collection from multiple APIs (Facebook, Twitter, YouTube, Flickr)
- Flexible analysis
- Multiple output formats (JSON, CSV, TSV, XML, GEFX, KML, XLS)
- Data exploration
- Descriptive and social network analytics and visualization
- Cartographic visualization
- Slicing data samples for deep qualitative analysis



Some Progress [Data/Methods]

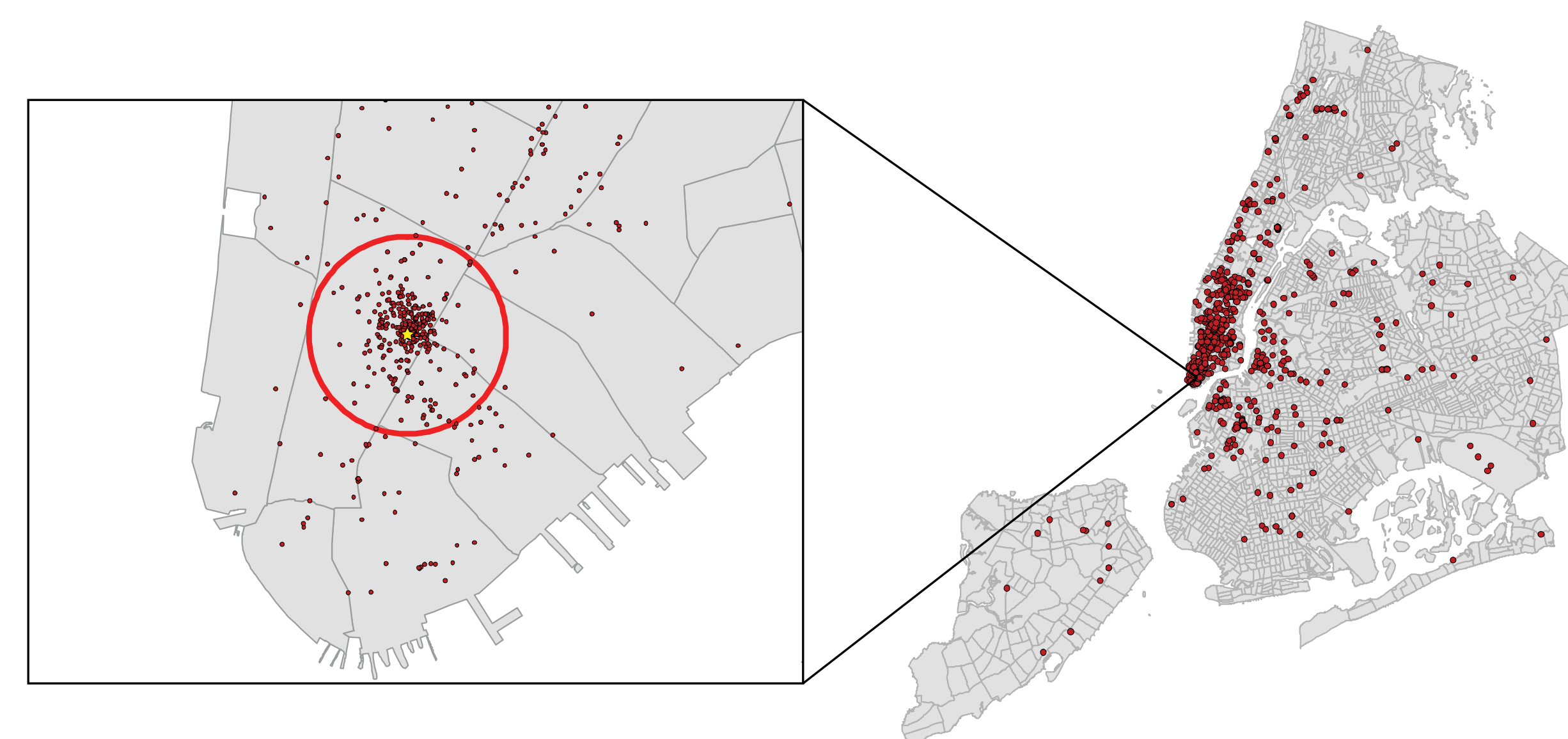
Online Information Flows



Social Network Analysis

Social Network Analysis allows researchers to answer questions about the actors and the structure of networks. Networks are a fundamental aspect of social media.

By studying the Occupy network of blogs, Facebook pages and web sites, we unsurprisingly find that Twitter is an information hub – a place where everyone seems to hear things first and where people are sent to listen for messages.



#Occupy related Tweets for Oct. 19 – Nov. 5, 2011
Of #occupy related tweets within New York, 37.09% with 1000' of Zuccotti Park () ★

Geographic Integration

Multi-scalar analysis of geocoded tweets suggest new lines of inquiry for spatial and time-series analysis.

Initial results with a themed corpus of Occupy related tweets show statistically significant spatial clustering around protest site locations during protest events.

How are social media users utilizing geolocation, within which bounds, and why?

The SoMeLab Vision

Interdisciplinary Design for Interdisciplinary Collaboration

Social media is ubiquitous and therefore deserving of attention across disciplines. However, few social science disciplines are acquainted with working with data at this scale. We are designing our toolkit in conjunction with researchers from communication, geography, computer science, and information science in order to create a robust platform supporting a variety of social media research.

We have made significant progress so far, but much remains to be done. We welcome inquiries from researchers who share our vision and would like to collaborate on the realization of a toolkit to enable additional interdisciplinary efforts.

The SoMeLab Team

Josef Eckert:

PhD Student,
Geography

Critical theory &
geographic information
systems

Empowerment &
disenfranchisement of
activists using new spatial
media

jeckert1@uw.edu

Jeff Hemsley:

PhD Candidate, Information
School.

Information flows in social
media

How social media may
disrupt existing power
structures

jhemsley@uw.edu

Shawn Walker:

PhD Candidate, Information
School.

Political participation,
social media, e-
government

What forms of
participation and
expression are enabled by
social media?

stw3@uw.edu

Robert M. Mason:

Professor,
Information School.

Information technologies
and values and norms

How social media can
shape new ways of
organizing knowledge
work

rmmason@uw.edu

Karine Nahon:

Professor,
Information School.

Politics & policy of
information in networks

Power dynamics of
networks & information
flows

karineb@uw.edu