

# Identity and Expertise in a Networked World

Can we measure a person's expertise?

It's a social construct, so we ask society...

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# Assumptions

- Identity is consolidating – online and offline
  - You are who you are
  - Online will become an extension of offline, not something separate
- People are interacting with more people in more mediated environments
  - A higher volume of people
  - A higher volume of systems and communities
- We have to decide how to evaluate these largely unknown spaces and people
  - We use personal history, trust, cognitive authority
  - Especially if we are a new entrant into an existing space or community

# Finding an Expert

- In “Real Life”, we find an expert through
  - Original research
  - Time and effort
  - Domain-specific knowledge
  - **Trusted peers** who have been there before us
- In mediated systems, we do the same thing
  - We ascribe value to information that seems authoritative
    - How do we do that? (Rieh)
  - We also ascribe cognitive authority (expertise) to individuals
    - Those who produce or are heavily involved with this information
    - But only in selected contexts

# Trusted Peers

- Expertise is highly contextualized
  - We don't trust our mechanic to do our tax returns.
- Trusted peers
  - They have their own contextually trusted peers
  - If our trusted peers are willing to share their trusted peers, we (should) value that information
  - When we first move to an area, we ask our neighbors and co-workers about
    - the best mechanics
    - the best dentists
    - the best place to find good sushi

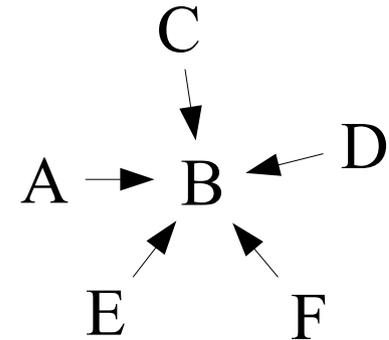
# How to contextualize? Tagging.

- A person's areas of expertise can be represented by:
  - a set of words
  - a weighted list of words
    - the aggregation of multiple people's sets of words
    - like the tagclouds at [del.icio.us](http://del.icio.us)

# Research Questions

- Can a group's assessment of an individual's expertise be measured?
- How do we determine this assessment's validity?
  - Is it internally consistent among peers? Does this matter?
  - Is it “good enough”, from different perspectives?
  - If it's wrong, what about it is wrong?
  - Is it comfortable to the person being evaluated?
  - Does the person find it agreeable?
  - What terms are missing? Who decides?
  - What if every term has to be 'approved' by the person a priori?
- **Can it get close enough to add value for other applications?**

# Four Lists



- Collected

- $B_A$  – What does A think B knows about?

- $B_B$  – What does B think B knows about?

- $B_B^*$  – What does B think EVERYONE thinks B knows about?

- Generated

- $B^*$  – What does EVERYONE think B knows about?

- This is a weighted list

# Group Decision-Making

- One vote per person allows us to measure what is popular, not what is correct or known. The systems we build concerning knowledge should not be democratic. We need to listen to the experts when they're talking about things they know.
- These assessments of expertise can be used to weight an individual's vote.
- A weighted vote is not a substitute for the popular vote, it is an additional vector to consider when making decisions as a group.
- Community examples where this could be useful:
  - Slashdot
  - Digg
  - Wikipedia