# Jacob Thebault-Spieker

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## Research

## Peer-Reviewed Conference & Journal Papers

In preparation - Missed Connections: The Geography of Uber Access

Aaron Halfaker, Oliver Keyes, Daniel Kluver, Jacob Thebault-Spieker, Tien T. Nguyen, Kenneth Shores, Anuradha Uduwage, Morten Warncke-Wang. WWW 2015 - User Session Identification Based on Strong Regularities in Inter-activity Time. Acceptance Rate: 14.1%

Thebault-Spieker, J., Terveen, L., Hecht, B. CSCW 2015 - Avoiding the South Side and the Suburbs: The Geography of Mobile Crowdsourcing Markets Acceptance Rate: 28.3%

Thebaut-Spieker, J. *Midwest Instructional Computing Symposium 2010* - Can protocol and application layer statistics improve client-server responsiveness?.

## Peer-Reviewed Conference Short & Poster Papers

Under Review - Showing Group Participation for Continued Engagement on Social Networks

# Conference and Seminar Presentations

Symposium on Urban Informatics Exploring Smarter Cities

Drexel University, College of Information Science and Technology, June 11, 2013.

AFS & Kerberos Best Practices Workshop 2009

Stanford University, OpenAFS, June 3, 2009.

#### Fields of Research Interest

Civic engagement, technology for social change, sociotechnical systems, crowdsourcing, mobile computing, collaborative open content communities.

## Education

PhD Student (PhD Candidate as of April 2013). Computer Science, University of Minnesota, 2011 - Present.

B.A. Computer Science, University of Minnesota, Morris, 2011.

B.A. Spanish, University of Minnesota, Morris, 2011.

# Relevant Experience

IBM Watson, Almaden, Research Intern, Summer 2014.

Defined and implemented a research project in the space of grassroots engagement efforts on Twitter. Successfully completed this project **Skills:** defining a research plan, experimental design, working collaboratively with a team

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#### University of Minnesota, Department of Computer Science, Research Assistant, 2011-Present.

I've been the lead developer for over 3 years building a mobile, geographic crowdsourcing application (FolkSource) that is nearing launch. I conducted semi-structured interviews with users in a case-study to understand motivations for using the system.

Skills: Java (Struts), javascript (enyojs), CSS, Phonegap, Semi-structured interviewing

#### Carnegie Mellon University, Department of Computer Science, REU Student, Summer 2010.

Researched the feasibility of prefetching in Internet Suspend/Resume. Demonstrated that the simple (boot) case does not provide performance improvements.

Skills: C, collaborative research with Dr. Mahadev Satyanarayanan.

# University of Minnesota – Morris, Department of Computer Science & OpenAFS, Undergraduate Research Project, *Jan. 2010 - June 2010*.

Extension of 2009 Google Summer of Code project, researched the use of network and server statistics to optimize server rankings and explored the distribution these statistics within the system.

**Skills:** C, independently motivated project, collaborative remotely.

#### Courses

#### CSci 5115: User Interface Design, Evaluation, and Implementation

Project-driven course, where each group was tasked with designing, developing, and iterating on a group-defined UI project. Skills: Persona Development, User testing, Usability lab practice, Cognitive Walkthroughs, Paper prototyping.

#### CSci 8115: Human-Computer Interaction & User Interface Technology

Research driven course, with a partnered research project goal. We developed and iterated on a Kinect-based system to support the transition process for transgendered individuals.

**Skills:** Coding transgendered forum data for definition of system goals (in place of user interviews for anonymity). Iterative development, UI techniques.

#### PSY 5108H: Mathematical Models of Human Behavior

I conducted a literature review focused on the importance of intrinsic motivation in the success of an online open-production community.

**Skills:** Bayes nets, game theory (including Nash Equilibria), time series, Collective Effort Model, role of intrinsic & extrinsic motivation in effort processes.

# Other Experience

University of Minnesota, Department of Computer Science, Teaching Assistant, 2011.

ITA'd CS 1902: Structures of Computer Programming II for 2 semesters. This included managing 3 lab sessions per week, and grading homework and exams.

Skills: Lead 3 lab sessions, collaborative course management with a graduate student and the Professor.

#### Your File System, Contractor, Summer 2011.

Worked on a number of small projects to support one of the primary developers. This included beginning to generalize cloning of AFS volumes.

Skills: C

#### Google Summer of Code, OpenAFS, Participant, Summer 2009.

Began using network statistics (latency, bandwidth, etc.) in order to improve client server choices. Implemented this in both Linux and Windows.

Skills: C, Independently proposed and driven project, collaborative remotely.

#### Google Summer of Code, OpenAFS, Participant, Summer 2008.

Implemented GPL-licensed Linux kernel interfaces to handle AFS Remote Procedure Calls (RPCs). Intended to support native Linux interaction with AFS, so AFS wouldn't need to maintain a kernel module.

Skills: C, Independently proposed and driven project, collaborative remotely.

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## Courses

**Other Courses Taken:** Advanced Algorithms, Principles of Database Systems, Foundations of Advanced Networking, and Introduction to Research I & II, Directed Research

# Honors, Awards, & Fellowships

Undergraduate Research Opportunity Program grant, University of Minnesota, Morris, Fall 2009.

Last updated: March 2, 2015