

Shaomei Wu

Web: www.shaomei.info

Email: shaomei@gmail.com

RESEARCH INTERESTS

- **AI & HCI:** Research and design empowering AI technologies with marginalized communities.
- **Accessibility:** Push the envelope of accessibility beyond checklists and legal requirements.
- **Computational Social Sciences:** Understand collective behaviors and systematic marginalization online and offline.

EDUCATION

- **Cornell University** Ithaca, NY
Doctor of Philosophy, Information Science
2007 - 2012
Dissertation: *The Dynamics of Information Diffusion on On-line Social Networks*
Advisory committee: Michael Macy, Jon Kleinberg, Dan Cosley
- **University of California, Santa Barbara** Santa Barbara, CA
Master of Science, Computer Science
2005 - 2007
- **Tsinghua University** Beijing, China
Bachelor of Science and Engineering, Computer Science
2001 - 2005

WORK EXPERIENCE

- **AImpower.org** Mountain View, CA
Founder and CEO
Feb 2022 - Present
 - Found and lead AImpower.org, a nonprofit 501(c)(3) organization that research and co-create technologies *for* and *with* marginalized communities to dismantle barriers, create benefits, and seek social justice.
- **MySpeech** Remote
Chief Technology Officer
Mar 2022 - Oct 2022
 - Guide MySpeech - a stuttering support and advocacy organization - during its transition to a digital platform for people who stutter. Responsibilities include: define R&D roadmap; architect technical infrastructure; advise the executive team on technical issues and directions; set up task management system; onboard and lead technical staff and volunteers.
- **Facebook** Menlo Park, CA
Staff Research Scientist
Mar 2013 - Nov 2021
 - **Instagram Equity:** Tech lead various efforts in identifying platform equity gaps and building new products for Black users on Instagram
 - **Facebook AI:** Found and lead the *AI for inclusion* initiative to build AI technologies that benefit marginalized and low-resourced communities through participatory design, rapid prototyping, and in-the-wide user studies.
 - **Core Data Science:** Drive research and engineering innovations on accessibility (e.g. [Automatic Alt-text on Facebook](#)); research and model networked behaviors such as app adoption, reshare of misinformation, and user churn.
- **Google** Various Locations
Research and Engineering Intern
Jul 2006 - Dec 2011
 - **Google.org:** Work on Google Person Finder and Crisis Alerts. Sep 2011 - Dec 2011
 - **Google Research:** Study the dynamics of user arrival and departures in a large social network. Jun 2011 - Aug 2011
 - **Google New York:** Build classifiers to categorize and rank user generated data (MyMaps). May 2009 - Aug 2009
 - **Google New York:** Build localized business classifiers for categorical search on Google Maps. May 2008 - Aug 2008
 - **Google Kirkland:** Build ML classifiers to identify hub pages for instant crawler. Jun 2007 - Aug 2007
 - **Google China:** Study online community structures and develop community detection algorithms. Jul 2006 - Sep 2006
- **Yahoo Research** New York, NY
Research Intern
May 2010 - Oct 2010
 - **Human Social Dynamics Group:** Work with Duncan Watts to study communication patterns in Twitter.
- **Microsoft Research Asia** Beijing, China
Research Intern
Jul 2004 - Jul 2005
 - **System Research Group:** Design and implement a large-scale, low-latency peer-to-peer routing protocol.

PUBLICATIONS

- **Shaomei Wu**. 2023. [“The World is Designed for Fluent People”: Benefits, Challenges, and Opportunities of Videoconferencing Technologies for People Who Stutter](#). In *Proc. of the ACM CHI Conference on Human Factors in Computing Systems (CHI ’23)*
- Yu-Ru Lin, **Shaomei Wu**, Winter Mason. 2022. **Mapping Language Literacy At Scale: A Case Study on Facebook**. Under Review
- **Shaomei Wu**, Lindsay Reynolds, Xian Li, Francisco (Paco) Guzman. 2019. [Design and Evaluation of a Social Media Writing Support Tool for People with Dyslexia](#). In *Proc. of the ACM CHI Conference on Human Factors in Computing Systems (CHI ’19)*
- Cole Gleason, Patrick Carrington, Lydia B Chilton, Benjamin M Gorman, Hernisa Kacorri, Andrés Monroy-Hernández, Meredith Ringel Morris, Garreth W Tigwell, and **Shaomei Wu**. 2019. [Addressing the Accessibility of Social Media](#). *CSCW 2019 Extended Abstract*
- Lindsay Reynolds, **Shaomei Wu**. 2018. [“I’m Never Happy with What I Write”: Challenges and Strategies of People with Dyslexia on Social Media](#). In *Proc. of the 12th International AAAI Conference on Web and Social Media (ICWSM)*. **Best Paper Runner-up**
- Yuhang Zhao, **Shaomei Wu**, Lindsay Reynolds, Shiri Azenkot. 2018. [The Effect of Computer-Generated Descriptions on Photo-Sharing Experiences of People with Visual Impairments](#). In *Proc. of the ACM Conference on Computer-Supported Cooperative Work & Social Computing (CSCW ’18)*
- Yuhang Zhao, **Shaomei Wu**, Lindsay Reynolds, Shiri Azenkot. 2018. [A Face Recognition Application for People with Visual Impairments: Understanding Use Beyond the Lab](#). In *Proc. of the ACM CHI Conference on Human Factors in Computing Systems (CHI ’18)*
- **Shaomei Wu**, Jeffrey Wieland, Omid Farivar, Julie Schiller. 2017. [Automatic Alt-text: Computer-generated Image Descriptions for Blind Users on a Social Network Service](#). In *Proc. of the 20th ACM Conference on Computer-Supported Cooperative Work & Social Computing (CSCW ’17)*. **The 14th most cited CSCW paper published from ’16 - ’21 (Google Scholar)**.
- Violeta Voykinska, Shiri Azenkot, **Shaomei Wu**, and Gilly Leshed. 2016. [How Blind People Interact with Visual Content on Social Networking Services](#). In *Proc. of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing (CSCW ’16)* **The 20th most cited CSCW paper published from ’16 - ’21 (Google Scholar)**.
- Isabel Kloumann, Lada Adamic, Jon Kleinberg, and **Shaomei Wu**. 2015. [The Lifecycles of Apps in a Social Ecosystem](#). In *Proc. of the 24th International World Wide Web Conference (WWW ’15)*.
- **Shaomei Wu**, Lada Adamic. 2014. [Visually Impaired Users on an Online Social Network](#). In *Proc. of The ACM CHI Conference on Human Factors in Computing Systems (CHI ’14)*.
- **Shaomei Wu**, Atish Das Sarma, Alex Fabrikant, Silvio Lattanzi, and Andrew Tomkins. 2013. [Arrival and Departure Dynamics in Social Networks](#). In *Proc. of the 6th ACM International Conference on Web Search and Data Mining (WSDM ’13)*.
- **Shaomei Wu**, Chenhao Tan, Jon Kleinberg, and Michael Macy. 2011. [Does Bad News Go Away Faster?](#). In *Proc. of the 5th International AAAI Conference on Weblogs and Social Media (ICWSM ’11)*.
- **Shaomei Wu**, Jake M. Hofman, Winter A. Mason, and Duncan J. Watts. 2011. [Who Says What to Whom on Twitter](#). In *Proc. of the 20th International World Wide Web Conference (WWW ’11)*. **Over 1000 citations by 2019.**
- **Shaomei Wu**, Shenwei Liu, Dan Cosley, and Michael Macy. 2011. [Mining Collective Local Knowledge from Google MyMaps](#). In *Proc. of the 20th International World Wide Web Conference (WWW ’11)*.

PUBLIC SPEAKING

- Invited Talk. Nov 3, 2022. **AI and the Empowerment of People with Disabilities**. SheTek Women’s Tech Conference 2022
- Invited Talk. Oct 21, 2022. **Acceptance and Empowerment as a Person Who Stutters**. International Stuttering Awareness Day (China)
- Podcast (in Chinese). Oct 11, 2022. **从硅谷科学家到非盈利机构创始人-吴少玫 (From Silicon Valley Scientist to Nonprofit Founder - Shaomei Wu)**. 口吃说 (Stammer Talk)
- Podcast (in Chinese). Jul 13, 2022. **在理科世界里摸爬滚打的女孩们 (Women in STEM)**. 故事FM
- Invited Talk. Apr 27, 2022. **AI and Systematic Marginalization of Disabled People**. Columbia University Data for Social Good Club

GRANTS

- National Stuttering Association CASE Grant. 2022. **Co-design Videoconferencing Technologies with People who Stutter**. Lead PI. Rejected.
- National Science Foundation Convergence Accelerator. 2022. **RECT-ify: Re-envisioning Communication Technologies with People who Stutter**. Lead PI. Rejected.

POPULAR BLOG POSTS & OTHER PUBLICATIONS

- **Shaomei Wu.** 2018. [Using AI to help people with visual impairments share images on Facebook](#). *Facebook Research Blog*.
- **Shaomei Wu, Lindsay Reynolds.** 2018. [Designing a face recognition application for people with visual impairments](#). *Facebook Research Blog*
- **Shaomei Wu.** 2016. [How blind people interact with visual content on social networking sites](#). *Facebook Research Blog*
- **Shaomei Wu, Darío García García, Manohar Paluri.** 2016. [Under the hood: Building accessibility tools for the visually impaired on Facebook](#). *Facebook Engineering Blog*
- **Shaomei Wu, Hermes Pique, Jeffrey Wieland.** 2016. [Using Artificial Intelligence to Help Blind People ‘See’ Facebook](#). *Facebook Newsroom*

SELECTED PRESS COVERAGE

- Work on automatic alt-text featured in [“Facebook Just Launched AI-Powered Technology That Reads Photos to the Blind”](#), *Fortune*, April 5, 2016.
- Research on Twitter featured in [“The New York Times and Twitter”](#), *The New York Times*, March 29, 2011.
- Research on Twitter featured in [“The Twittersphere is Dominated By Less than One Percent of Twitter Users”](#), *Time*, March 29, 2011.

PROFESSIONAL SERVICES

- **Program Co-Chair:** WebForAll (W4A) 2023
- **Accessibility Challenge Co-Chair:** W4A 2022
- **Doctorate Consortium Co-Chair:** W4A 2021
- **Associate Chair:** the ACM CHI Conference on Human Factors in Computing Systems (CHI) 2018, 2020, 2021, 2022
- **Senior Program Committee:** the International AAAI Conference on Web and Social Media (ICWSM) 2016 - 2023
- **Dataset Co-Chair:** ICWSM 2022
- **Tutorial Co-Chair:** ICWSM 2021
- **Workshop Co-Chair:** ICWSM 2019
- **Program Committee:** The Web Conference (TWC, formally WWW) 2019, 2021, 2022
- **Program Committee:** the International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS) 2015 - 2022
- **Program Committee:** ICWSM 2013, 2014
- **Workshop Organizer:** *Addressing the Accessibility of Social Media Workshop @ CSCW* 2019
- **Panel of Judges:** W4A Accessibility Challenge 2020, 2021
- **Reviewer:** the ACM Transactions on Accessible Computing, the ACM International Conference on Web Search and Data Mining (WSDM) (2012), CHI (2016, 2017, 2019), the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW) (2018, 2019, 2020, 2021), the ACM Symposium on User Interface Software and Technology (UIST) (2019), New Media & Society

TEACHING EXPERIENCE

- **Cornell University**
 - *Teaching Assistant*
 - **INFO 4302/6302:** Web Information Systems. *Spring 2011*
 - **PSYCH/COGST/INFO 214/614:** Computational Cognitive Psychology. *Fall 2007*
- **University of California, Santa Barbara**
 - *Teaching Assistant*
 - **CS10:** Object Oriented Programming in Java. *Winter 2007*
 - **CS276:** Graduate Networking. *Fall 2006*
 - **CS290F:** Large-scale Networked Systems. *Spring 2006*
 - **CS5JA:** Introduction to Computer Programming. *Winter 2006*
 - **CS170:** Operating Systems. *Fall 2005*

MENTORING EXPERIENCES

- Siddharth Bajaj (MPS Student at Cornell Information Science)
- Jiang Jian (MPS student at Cornell Information Science)
- Violeta Voykinska (MPS student at Cornell Information Science, now Senior Design Researcher at Designit)
- Isabel Kloumman (PhD Intern, now Research Manager at Facebook)
- Yuhang Zhao (PhD Intern, now Assistant Professor at University of Wisconsin, Madison)
- Kinyetta Nance (PhD Intern, co-mentor, now Researcher at Twitter)
- Kelly Mack (Undergrad Intern, co-mentor, now PhD student at University of Washington)
- Rose Hong (Undergrad Intern, now senior at Harvard University)
- Michela Paganini (Postdoc Researcher at Facebook AI Research, now Research Scientist at DeepMind)
- Roman Rädle (Visiting Researcher at Facebook / Assistant Professor at Aarhus University, now Software Engineer at Facebook)
- Xinyue Zhang (Software Engineer at Facebook)
- Xinyu Li (Software Engineer at Facebook)
- Ming Sun (Applied Research Scientist at Facebook)

REFERENCES

A full list of references is available upon request.