

Xinyi Wang

www.xinyiwang.org

wang4831@umn.edu

Kenneth H. Keller Hall, 200 Union St SE, Minneapolis, MN 55455

RESEARCH AREA

Sharing Economy,
Crowdsourcing, VR/AR
Social Computing,
NLP, Machine Learning,
Organizational Psychology

I use mixed methods to understand, analyze and design computational tools and data in social settings.

EDUCATION

University of Minnesota, Twin Cities

Minneapolis, MN

PH.D. IN COMPUTER SCIENCE

EXPECTED MAY 2021

- Advisor: Dr. Haiyi Zhu
- Research Affiliation: GroupLens Research

University of Minnesota, Twin Cities

Minneapolis, MN

B.A. IN PSYCHOLOGY

SEPTEMBER 2013 - MAY 2016

- Major GPA: 3.9/4.0
- Minor: Statistics
- GRE: 155(V) + 170/170(Q)

University of Virginia

Ten European Countries

SEMESTER AT SEA PROGRAM

JUNE 2014 – AUGUST 2014

Beihang University

Beijing, China

MAJOR: LINGUISTICS CONCENTRATION

SEPTEMBER 2011 - JULY 2013

SCHOLARSHIPS AND AWARDS

CRA-W scholarship | Computing Research Association December 2016

- Grad Cohort Workshop in April, 2017
- A Community Rather Than A Union: Understanding Self-Organization Phenomenon on MTurk and How It Impacts Turkers and Requesters (CHI'17)

UROP scholarship | University of Minnesota

February 2016

- Undergrad Research Opportunities Program

UROP scholarship | University of Minnesota

August 2015

- Undergrad Research Opportunities Program

Dean's List | University of Minnesota

spring 2015

Dean's List | University of Minnesota

spring 2014

Gold Medal | "FengRu Cup" Competition

May 2013

- The 23rd "FengRu Cup" Students Academic, Scientific & Technological Works Competition
- Awarded graduate school admission to Beihang University

Honorable Award | "Smile at Beihang" Photography Competition 2012

Best Debater | Annual Debate Competition of Beihang University 2012

Outstanding Coordinator of Year 2011 | Beihang University 2011

SELECTED PUBLICATION

Top-Tier Conferences in Computer Science

Orcid : 0000-0002-1169-4496

1. C. Estelle Smith, **Xinyi Wang**, Raghav Karumur, and Haiyi Zhu. 2018. [Un]breaking News: Design Opportunities for Enhancing Collaboration in Scientific Media Production. Proc. CHI 2018.
2. Tawanna R Dillahunt, **Xinyi Wang***, Earnest Wheeler*, Hao Fei Cheng, Brent Hecht, and Haiyi Zhu. 2018. The Sharing Economy in Computing: A Systematic Literature Review. In Proceedings of the 21st ACM conference on Computer Supported Cooperative Work & Social Computing.
3. Bowen Yu, **Xinyi Wang**, Allen Yilun Lin, Yuqing Ren, Loren Terveen, and Haiyi Zhu. 2018. Out With The Old, In With The New? Unpacking Member Turnover in Online Production Groups. Proc. ACM Hum.-Comput. Interact. 1, 1, Article 117 (January 2018), 19 pages. <https://doi.org/10.1145/3134752>
4. **Xinyi Wang**, Haiyi Zhu, Yangyun Li, Yu Cui, and Joseph Konstan. 2017. A Community Rather Than A Union: Understanding Self-Organization Phenomenon on MTurk and How It Impacts Turkers and Requesters. In CHI Extended Abstracts. 2210–2216.

In Review

5. **Xinyi Wang**, I-Ju Lin, Teng Ye, Casey Pierce, Lionel Roberts and Haiyi Zhu. (In review). A Taxonomy of Contextual Trust in Physical Sharing Economy
6. **Xinyi Wang**, Zhiyi Li, I-Ju Lin, and Haiyi Zhu. (In review). The Power of Small Gifts: Gendered Effects of Non-monetary Rewards on Couchsurfing Hosting
7. Colleen Estelle Smith, **Xinyi Wang**, Raghav Karumur, and Haiyi Zhu. (In review). Lost in [Mis]translation: An Interview Study on Mass Media Coverage of Human-Computer Interaction Research

Venues in Psychology

8. **Xinyi Wang**, Mychele Montgomery, J. Leon, and FangYee Chiang. 2015. The Effect of Smiling on Men's Perceived Attractiveness of Women. Sentience.
9. **Xinyi Wang**. 2015. Improving Attention through Training. Retrieved from the University of Minnesota Digital Conservancy, <http://hdl.handle.net/11299/173681>.

SYSTEMS AND PROTOTYPES

Flip*Doubt

NOVEMBER 2017 - PRESENT

A working system, built using ReactJS, React Native, and MongoDB

The goal of this system is to help mental health sufferers reformulate negative thoughts with the help of an anonymous crowd. Using either the web or mobile app, users can input negative thoughts into the system and see how their negative thoughts are reformulated into something positive and supportive by either anonymous crowd workers on Mechanical Turk or other members of the online Flip*Doubt community. The users are also able to track the thoughts and how frequent they have them over time using the flippable cards in our app.

Novelist

SEPTEMBER - OCTOBER 2017

A working system, built using Express and MongoDB

Novelist is a crowd-based collaboration platform for creative work. This is a proof of concept prototype on how collaboration of creative work (such as writing a novel together) can be done among a crowd of strangers.

Mobi

SEPTEMBER - DECEMBER 2016

Comprehensive UI research, created persona and prototyped using AngularJS

A friend-sourcing app on android mobile phones. The main goal of this app is to facilitate the request of help between friends or among second-level friends. Mobi not only enables requesters to reach out to a wider audience, but also releases the social pressure on helpers.

SELECTED RESEARCH EXPERIENCE

GroupLens Lab | RESEARCH ASSISTANT

Advisor: Professor Haiyi Zhu

SEPTEMBER 2015 - PRESENT

Department of Computer Science and Engineering, UMN

- Used Grounded Theory Methods to explore how trust is generated in physical sharing economy communities. I constructed a taxonomy of factors that influence decision making in the scenarios when users have to interact in the physical world
- Conducted literature review on the current progress of sharing economy research in the computing literature.
- Designed experiments and analyzed user interactions in online peer production communities such as Wikipedia, and crowdsourcing platforms such as Amazon Mechanical Turk.

Department of Work and Organization | RESEARCH ASSISTANT

Advisor: Professor Le (Betty) Zhou

MARCH 2015 - MARCH 2016

Carlson School of Management, UMN

- Ran the laboratory experiment on the role of leadership in team goal pursuit; collected and coded data
- Recruited, ran and debriefed participants of the experimental laboratory study
- Reviewed literature on team structure and self-regulation process, and related research methods

Industrial/Organizational Psychology Lab | RESEARCH ASSISTANT

Advisor: Professor Deniz Ones

SEPTEMBER 2015 - MARCH 2016

Department of Psychology, UMN

- Performed meta-analysis on selective topics
- Wrote a proposal on selective topics for a spring 2016 Undergraduate Research Opportunity Program (UROP) project
- Collected data on counterproductive workplace behavior, dark triad, organizational citizenship behavior, unethical pro-organizational behavior, and cognitive mental ability

Academy of Management | PROJECT ASSISTANT

Advisor: Professor John Kammeyer-Mueller

AUGUST 2015 – NOVEMBER, 2015

Carlson School of Management, UMN

- Recovered the lost measurement scales from the Measure Chest
- Located the sources and references of measurement scales on selective topics

Attention, Memory and Cognition Lab | RESEARCH ASSISTANT

Advisor: Professor Yuhong Jiang

AUGUST 2014 – AUGUST 2015

Department of Psychology, UMN

- Recruited, ran and debriefed study participants
- Ran experiments using participants from students participants pool
- Collected, coded, and analyzed data using R and SPSS
- Bi-monthly presentations to the entire lab on literature of interest
- Conducted a project using self-designed Matlab program; analyzed data independently

Undergrad Research Opportunities Program (UROP) | STUDENT RESEARCHER

Advisor: Professor Yuhong Jiang

APRIL 2015 - AUGUST 2015

Department of Psychology, UMN

- Conducted a project on "Improving Attention through Training" using self-designed Matlab program
- Analyzed data independently using R and SPSS
- Recruited, ran and debriefed study participants

The Center for Interest Measurement Research | RESEARCH ASSISTANT

Advisor: Professor Jo-Ida Hansen

JANUARY 2015–MAY 2015

Department of Psychology, UMN

- Worked on inventory construction and vocational interest measurement for survey studies
- Familiarized with inventories, such as California Psychological Inventory (CPI), Strong Interest Inventory (SII), and Leisure Interest Questionnaire (LIQ)
- Drafted a write-up on the validity of Leisure Interest Questionnaire
- Proposed a preliminary theoretical model on the career decision making

Institute of Psychology, Chinese Academy of Science | RESEARCH ASSISTANT

Advisors: Dr. Weina Qu and Dr. Yan Ge

APRIL – AUGUST 2013

Beijing, China

- Conducted literature search on sustained attention
- Project topic: Cognition Method of the Driver's Sustained Attention Status
- Translated English measurement inventories to Chinese and adapted them for different populations
- Familiarized with research methods using survey inventories, simulation machines, and EEG

LEADERSHIP EXPERIENCE

PSYCHOLOGY INTERNATIONAL STUDENT ASSOCIATION (PISA) | PRESIDENT

September 2013 - May 2016 | University of Minnesota

- Vice President (2014 - 2015), member (2013 - 2014)
- Administered PISA and coached 72 members to increase the presence among 1000 Psych majors
- Organized Welcome Back Event and PISA Internship Seminar to promote PISA

INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY CLUB (IOPC) | CO-CHAIR

September 2015 - February 2016 | University of Minnesota

- Co-founded IOPC
- Introduced IOPC to the psychology undergraduate student groups
- Initiated effort to increase the presence of I/O psychology among freshmen and sophomores
- Planned on inviting faculties and graduate students from I/O psychology as keynote speakers in the coming events

STUDENTS' ASSOCIATION UNION | VICE PRESIDENT

September 2011 - May 2014 | Beihang University

- Supervised all the 140 student clubs
- Led 4 assistants and 51 members to run the Student Association Union smoothly
- Coordinated the worldwide televised 60th Anniversary Ceremony of Beihang University

RAINBOW PRIMARY SCHOOL | Volunteer English Teacher

October 2013 - January 2014 | Minneapolis, MN

COUNCIL OF UNDERGRADUATE STUDENT | Event Coordinator

2011 - 2012 | Beijing, China

FRESH FOOD COMPANY | Work study

2012 | Chengdu, China

SERVICE TO THE DISCIPLINE

- **SIGCHI Executive Committee Student Volunteer for CHI'18** April 2018
- **Student Volunteer for CSCW'17** March 2017

PROFESSIONAL AFFILIATIONS

- **ACM member** Since February 2017
- **American Psychology Association** Since September 2013
- **Tau Sigma National Honors Society** Since January 2014

RELEVANT COURSEWORK

- **VR for Social Good, Social Network Analysis, Software Engineering**
- **User Interface Design, HCI & UI Technology, Developing the Interactive Web, Machine Learning**
- **Program Design & Development, Social Computing, Algorithm and Data Structure**

SKILLS

Programming languages

Python, Java, C++
Matlab, JavaScript
HTML, CSS

Data analysis tools

R, R Studio
SPSS, Matlab
Scikit-learn

Web/Mobile Development

Express, Node.JS, Angular
Ionic, React, React Native
Heroku, Github, MongoDB

Languages

English, Mandarin
German

Crowdsourcing

Amazon Mechanical Turk

Design tools

Photoshop, AI