

Zheng Yao

📞 607-280-0366

✉️ zyao2@andrew.cmu.edu

📍 5000 Forbes Avenue, Pittsburgh, PA, 15213, USA.

🐦 [@zhengyaohci](https://twitter.com/zhengyaohci)

🌐 zheng-yao.com

Research Interest

I am interested in utilizing human-computer interaction (HCI) methods to empower marginalized communities. My current work focuses on facilitating peer social support among marginalized groups in online communities, such as cancer patients, people with mental health issues, and gig workers. My work is deeply rooted in the well-being of community members - I look into both how different individuals contribute and make the most of social support and how the community benefits as a whole.

Education

expected 2022 **Ph.D., Human Computer Interaction**

School of Computer Science, Carnegie Mellon University, Pittsburgh, PA, USA

Thesis: "Peer Support in Online Communities"

Committee: Robert E. Kraut (co-chair), Haiyi Zhu (co-chair), Sarah Fox, Julia Ticona

2016 **M.P.S., Information Science**

Department of Information Science, Cornell University, Ithaca, NY, USA

The William Lewis Brown Scholarship for Computing and Information Science, Top 1 in 300+

2015 **B.A., Information Science**

The College of Arts & Sciences, Cornell University, Ithaca, NY, USA

magna cum laude

Honors & Awards

2020 Best Paper Honorable Mention Award, ACM CSCW 2020

2020 Grace Hopper Conference Attending Award, Carnegie Mellon University

2019 Best Paper Honorable Mention Award, ACM CHI 2019

2018 Best Paper Award, ACM CSCW 2018

2016 The William Lewis Brown Scholarship for Computing and Information Science

2015 Cornell University Distinction with honors in Information Science

2015 Best Paper Honorable Mention Award, ACM CSCW 2015

2011-2015 Cornell University College of Arts and Sciences: Dean's list

Peer-Reviewed Conference and Journal Papers

* denotes equal contribution

- [C.7] **Yao, Z.**, Yang, D., Levine, J.M., Low, C.A., Smith, T., Zhu, H., and Kraut, R.E. “Join, Stay or Go? A Closer Look at Members’ Life Cycles in Online Health Communities.” In the *Proceedings of the ACM on Human-Computer Interaction (CSCW’21)*.
- [C.6] Gong, J.*, **Yao, Z.***, Lu, Z.*, Ding, Q., Zhang, Y., Zhang, L., and Wang, Q. “All in One Group: Current Practices, Lessons and Challenges of Chinese Home-School Communication in IM Group Chat.” In the *Proceedings of the ACM Conference on Human Factors in Computing Systems 2021 (CHI’21)*.
- [C.5] 🏆 Li, A.*, **Yao, Z.***, Yang, D., Kulkarni, C., Farzan, R., and Kraut, R.E. “Successful Online Socialization: Lessons from the Wikipedia Education Program.” In the *Proceedings of the ACM on Human-Computer Interaction (CSCW’20)*. **Best Paper Honorable Mention, Top 5%.**
- [C.4] 🏆 Yang, D., **Yao, Z.**, Seering, J., and Kraut, R.E. “The Channel Matters: Self-disclosure, Reciprocity and Social Support in Online Cancer Support Groups.” In the *Proceedings of the ACM Conference on Human Factors in Computing Systems 2019 (CHI’19)*. **Best Paper Honorable Mention, Top 5%.**
- [C.3] 🏆 Seering, J., Ng, F., **Yao, Z.**, and Kauffman, G. “Applications of Social Identity Theory to Research and Design in Computer-Supported Cooperative Work.” In the *Proceedings of the ACM on Human-Computer Interaction (CSCW’18)*. **Best Paper Award, Top 1%.**
- [C.2] Volda, A., **Yao, Z.**, and Korn, M. “(Infra)structures of Volunteering.” In the *Proceedings of the ACM Conference on Computer Supported Cooperative Work 2015 (CSCW ’15)*.
- [C.1] 🏆 Gao, G., Xu, B., Hau, D.C., **Yao, Z.**, Cosley, D., and Fussell, S.R. “Two is Better Than One: Improving Multilingual Collaboration by Giving Two Machine Translation Outputs.” In the *Proceedings of the ACM Conference on Computer Supported Cooperative Work 2015 (CSCW ’15)*. **Best Paper Honorable Mention, Top 5%.**

Lightly-reviewed Posters

- [P.2] Quintana, R., Brooks, C., Smothers C., Tan, Y., **Yao, Z.**, Kulkarni, C. “Mentor Academy: Engaging Global Learners in the Creation of Data Science Problems for MOOCs. In the *Proceedings of International Conference of the Learning Sciences 2018 (ICLS’18)*.
- [P.1] Yang, D., **Yao, Z.**, and Kraut, R.E. 2017. “Self-disclosure and Channel Difference in Online Health Support Groups.” In the *Proceedings of The 11th International AAAI Conference on Weblogs and Social Media (ICWSM ’17)*.

Manuscript in Submission

- [M.3] **Yao, Z.**, Weden, S., Emerlyn, L., Zh,u H., and Kraut, R.E. “Together But Alone: Atomization and Peer Support among Gig Workers.”

- [M.2] **Yao, Z.**, Zhu, H., and Kraut, R.E. “Understanding the Learning Journey of Online Volunteer Counselors.”
- [M.1] Wang, H.*, **Yao, Z.***, and Yang, D. “Connecting Self-report Questionnaire and Behaviors to Analyze Mental Health Change in Online Peer Counselling.”

Research Experience

- 2021 **Research Intern.** Microsoft Research, Cambridge, UK
Incoming. Working with Dr. Anja Thieme in the Healthcare Intelligence group. Internship postponed from Summer 2020 to Summer 2021 due to COVID-19.
- 2016 - 2021 **Graduate Researcher.** Carnegie Mellon University, Pittsburgh, USA
Examined peer support exchange of marginalized populations in large-scale online communities, including Wikipedia newcomers [C.5], cancer patients [C.7], people with mental health issues [M.2, M.3] and gig workers [M.1]; proposed actionable design recommendations for various stakeholders, including technologists and policymakers.
- 2019 **Research Intern.** Lenovo Research, Beijing, China
Designed and conducted mixed-method analysis on how parents and teachers communicate in China [C.6].
- 2014 - 2016 **Research Assistant.** Cornell University, Ithaca, USA
Ran in-lab experiments and developed coding scheme for conversation corpus to analyze affective grounding in instant messenger tools with machine translation [C.1].

Teaching Experience

Carnegie Mellon University

- 2021 Teaching Assistant and Instructor. 05-820 Social Web.
2020 Teaching Assistant and Instructor. 05-610 User-Centered Research and Evaluation.

Cornell University

- 2016 Teaching Assistant. INFO 4450/6450 Computer Mediated Communication.
2014 Teaching Assistant. INFO 4400/6400 Advanced HCI Design.
2014 Teaching Assistant. INFO 2300 Intermediate Web Programming.
2013 Teaching Assistant. INFO 2450 Communication and Technology.
2013 Teaching Assistant. INFO 1300 Introduction to Web Design and Programming.

Mentoring Experience

2021	Yuhan Liu , Carnegie Mellon University, graduate researcher
2021	Hao Wang , Georgia Institute of Technology, graduate researcher
2020-2021	Silas Weden , Smith College, REU Intern at CMU
2020-2021	Lea Emerlyn , Carnegie Mellon University, undergraduate researcher
2018	Bahar Haji-Sheikhi , Northeastern University, REU Intern at CMU
2018	Yutian Cai , Carnegie Mellon University, undergraduate researcher
2017	Laura Bressler , Carnegie Mellon University, undergraduate researcher
2017	Andrew Puglionesi , University of Pittsburgh, REU Intern at CMU
2017	Yuling Liu , Carnegie Mellon University, graduate researcher
2016	Yining Zhao , Carnegie Mellon University, graduate researcher
2016	Sarah Shy , Carnegie Mellon University, undergraduate researcher

Service

2017 - 2021	Conference Reviewer, ACM CHI
2017 - 2021	Conference Reviewer, ACM CSCW
2017 - 2021	Cornell Alumni Ambassador & Interviewer
2017 - 2018	CMU HCII Ph.D. Student Ombudsman
2020	CMU HCII Ph.D. Admission Committee

Skills

Research:	Interview (in-person and remote), Survey, Diary study, Content analysis, Contextual inquiry, Ethnography, Usability testing, Statistical modeling & analysis, Experimental design
UX Design:	Persona, User Stories, Wireframing, Storyboarding, Prototyping, Adobe Illustrator, Photoshop & InDesign
Programing:	Python, Stata, R, SQL, HTML, CSS, JavaScript

References

Dr. Robert E. Kraut

Herbert A. Simon Professor, Human-Computer Interaction Institute, Carnegie Mellon University

Dr. Haiyi Zhu

Daniel P. Siewiorek Assistant Professor, Human-Computer Interaction, Carnegie Mellon University

Dr. Sarah Fox

Assistant Professor, Human-Computer Interaction, Carnegie Mellon University

Dr. Julia Ticona

Assistant Professor, Annenberg School for Communication, University of Pennsylvania