Fanghui Xiao

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Research Skills: Survey and interview design for understanding users' attitudes and behaviors, experimental research design, content analysis, focus group, transaction log analysis, statistical analysis (Python and SPSS), data visualization

EDUCATION

University of Pittsburgh	Information Science, GPA 3.8/4.0	Ph.D., 04/2023 (Expected)
University of Pittsburgh	Library & Information Science, GPA 3.8/4.0	MLIS, 2016

SELECTED ONGING RESEARCH PROJECTS

Research on Categorizing Open Government Data Users. The study attempts to explore Open Government Data (OGD) users' characteristics and creating corresponding personas based on user challenges and proficiency.

- Employing content analysis to analyze an online discussion community post content managed by a U.S. local-level OGD portal, we examined users' challenges and proficiency of using OGD, then identified four attributes that are used to cluster OGD users.
- Utilizing k-means clustering methods based on the human annotation results of the four attributes, and we investigated OGD user characteristics and ultimately created personas for them.
- The contributions contain facilitating OGD platform interface and system design and delivering advanced personalized informational and technological assistance to OGD users, which can improve the usages of OGD and enhance users' experience when interacting with OGD.

Research on developing a conceptual model for online human OGD interaction. This study aims to understand OGD user behaviors when interacting with OGD and develop a corresponding conceptual model.

- Using content analysis methods based on an online discussion community post content managed by a U.S. local-level OGD portal, we first identified user experience of interacting OGD, e.g., challenges and needs.
- Then, adopting in-depth interview methods with critical incident technique to probe deeper into users' behaviors when they interact with OGD, understand the corresponding challenges and needs, and further explore the findings from the content analysis.
- This study will contribute a conceptual model for human online OGD interaction to the field of HDI. This model will provide evidence-based guidelines to scholars and researchers with similar research interests and data portal designers to serve their users more appropriately.

SELECTED INTERNSHIPS

HCI Intern
May. 2020
Aug. 2020

Human Engineering Research Laboratories, University of Pittsburgh. This project aims to develop a comprehensive technology-based intervention and evaluate the cost-effectiveness of using mainstream smart home technologies as AT among people with physical disabilities residing in the community who are at risk of institutionalization.

- Investigated the features, device compatibility and communication protocols, and installation environments of the existing smart devices such as smart bulbs, smart locks, and smart switches.
- Designed a database interface for the project by using Axure.

Graduate Student Researcher
Sep. 2016
Aug. 2017

Western Pennsylvania Regional Data Center (WPRDC)
Research on supporting users to access open government data (OGD). This study seeks to explore what contextual information users require when they access OGD.

- Utilized exploratory-sequential mixed-method design. A semi-structured interview was conducted first to obtain deeper insights into the users' needs for crucial contextual information.
- Employed the synthesis of the interview results and the sense-making theories, we designed a survey and disseminated it to a large group of users.
- By conducting qualitative and quantitative analysis, we identified a framework of crucial contextual information that can facilitate to access OGD.
- This research paper was presented at the 2019 Conference on Human Information Interaction and Retrieval (CHIIR).

Product Design Intern Sep. 2015 Apr. 2016	**Menusifu. Inc.(New York City)** ▪ Identified and collected users' needs by communicating with customers ▪ Designed product interfaces and functions according to users' needs and suggestions from software engineer coworkers ▪ Controlled the timelines of product development in order to ensure timely production completion

SELECTED FULL TIME WORK EXPERIENCE

Project Manager Mar. 2010 Jun. 2012	**Baidu Co., Ltd, Beijing, China** ▪ Collaborated with product manager and software engineer to design internal management products, including the Business Process Management System and an Online Training System used by more than 2000 employees in five sales branches of Baidu. ▪ Helped coordinate the Pangu project which increased sales by 114.34 percent per capita, which received the 2011 Baidu President's Special Award. ▪ Analyzed sales performance data from branches nationwide and generated reports for the director.
Training Specialist Dec. 2006 Feb. 2010	▪ Formulated and implemented onboard training plans for new employees, and internal products/tools training for existing employees. ▪ Designed and conducted interviews to learn training needs for enhancing employee training mechanisms: analyzed the interview results and then designed the courses and training techniques according to the analysis results. Evaluated and documented training session performance. ▪ Initiated the creation of a library system, including system design and book selection; more than 1000 employees use that in the Beijing branch of Baidu.

SELECTED PUBLICATIONS AND PRESENTATIONS

1. **Xiao, F.,** (2021). Toward a conceptual model for users' online open government data interaction. *In Proceedings of the 2021 Conference on Human Information Interaction and Retrieval (CHIIR '21).* Association for Computing Machinery, New York, NY, USA, 355–358.
2. **Xiao, F.,** Wang, Z., & He, D. (2020). Understanding users' accessing behaviors to local Open Government Data via transaction log analysis. *Proceedings of the Association for Information Science and Technology*, *57*(1), e278.
3. **Xiao, F.,** Ma, R., & He, D. (2020). Task-based human-structured research data interaction: A discipline independent examination. *Proceedings of the Association for Information Science and Technology*, *57*(1), e308.
4. **Best short paper award. Xiao, F.,** He, D., Chi, Y., Jeng, W., & Tomer, C. (2019). Challenges and supports for accessing open government datasets: Data guide for better open data access and uses. In *Proceedings of the 2019 Conference on Human Information Interaction and Retrieval* (pp. 313-317). ACM.
5. **Xiao, F.,** Jeng, W., & He, D. (2018). Investigating metadata adoptions for open government data portals in US cities. *Proceedings of the Association for Information Science and Technology*, *55*(1), 573-582.

ACADEMIC SERVICES

- Reviewer of ACM Conference on Human Factors in Computing Systems (CHI) 2021
- Reviewer of Journal of The Association for Information Science and Technology (JASIST) 2020
- Reviewer of Journal of PLOS ONE 2021
- Reviewer of Aslib Journal of Information Management 2021

AWARDS

- Mary Margaret Corbett Memorial Award for best PhD LIS dissertation proposal. University of Pittsburgh, 2021
- SIGIR Student Travel Grant, Conference on Human Information Interaction and Retrieval (CHIIR2021), 2021
- Best short paper Award, Conference on Human Information Interaction and Retrieval (CHIIR2019), 2019
- Outstanding employee, Baidu Co., Ltd, Beijing, China, 2008, 2009