

Pei-Hua Tsai

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EDUCATION

National Yang Ming Chiao Tung University (NYCU) , Hsinchu City, Taiwan M.S. in Computer Science (GPA: 4.22/4.3)	Sept 2022 – Sept 2025
National Yang Ming Chiao Tung University (NYCU) , Hsinchu City, Taiwan B.S. in Computer Science (GPA: 4.08/4.3)	Sept 2018 – June 2022

WORK EXPERIENCE

Research Assistant , Singapore Management University, Singapore <i>Supervised by Prof. Tony Tang</i> - Led qualitative data collection and analysis for a cross-institutional collaboration between SMU and NYCU on AI-mediated self-disclosure in online dating. - Collaborated closely with Prof. Tang on research framing, iterative analysis, and interpretation of findings. - First-authored and prepared a full paper submission to DIS, incorporating internal and external feedback.	Sept 2024 – Mar 2025
User Research Intern , UXI Design Company, Taipei City, Taiwan - Identified undergraduates' needs for an online resource platform through desk research, interviews, questionnaires, personas & scenarios, and user journey mapping - Proposed short- and long-term design recommendations based on synthesized user research	Jan 2023 – April 2023

HONOURS and AWARDS

- TAICHI 2025 – Honorable Mentioned Award

PUBLICATIONS

- Tsai, P. H.**, Zhang T., Poh E., Tang T., & Chang, Y. J. (2026). Not Too Early, Not All at Once: Design Tensions in AI-Mediated Self-Disclosure in Online Dating. In *Proceedings of the ACM Conference on Designing Interactive Systems (DIS 2026)*.
- Lin Y. C., **Tsai, P. H.**, Weng Y. H., Chiu H. L., Ma C. Y., & Chang, Y. J. (2026). "There Were Too Many to Check, So I Just Added One": Using an LLM-Powered Agent to Reduce Redundant Reports in Crowdsourced Reporting. In *Proceedings of the ACM Conference on Designing Interactive Systems (DIS 2026)*.
- Chou, Y. L., **Tsai, P. H.**, Hsieh, G., & Chang, Y. J. (2026). "I Can't Respond to Everyone": An Empirical Investigation of Social Media Influencers' Management of Controversies. In *Proceedings of the ACM Conference on Computer-Supported Cooperative Work (CSCW 2026)*.
- Lin, F. Y., **Tsai, P. H.**, Lee, C. Y., Ho, Y. T., Chen, Y. K., Yen, Y. C., & Chang, Y. J. (2024, May). "I Prefer Regular Visitors to Answer My Questions": Users' Desired Experiential Background of Contributors for Location-based Crowdsourcing Platform. In *CHI 2024: Proceedings of the CHI Conference on Human Factors in Computing Systems* (pp. 1-18). (Acceptance: 26.3% - 1060/4028) (Co-first author)

RESEARCH EXPERIENCE

Understanding Opportunities and Concerns of AI-Mediated Self-Disclosure in Online Dating - Conducted 29 semi-structured interviews and an inductive thematic analysis approach to empirically investigate how users envision AI agents scaffolding, delegating, and interpreting self-disclosure in the fragile early stages of online dating—extending beyond prior work on topic suggestion or message assistance. - Identified key tensions between communication efficiency and experiential value, demonstrating that in intimate contexts, showing that "better" intimate communication depends on preserving pacing, reciprocity, and co-construction rather than speed or smoothness. - Proposed multi-agent mediation—where each partner is supported by a coordinating AI agent—as a conceptual direction for future relational AI design.	Sept 2024 - Sept 2025
Leveraging LLMs to Reduce Redundant Reports on Crowdsourcing Platforms - Showed that LLM assistance reduced the creation of redundant reports and increased contributors' engagement in reviewing and updating existing reports, resulting in lower redundancy rates. - Identified user-perceived benefits of LLM-supported reporting, including reduced effort in report matching, improved convenience in mobile contexts, and greater willingness to reuse existing content.	Jan 2023 - Sept 2025

- Revealed key friction points limiting effectiveness, including trust concerns around black-box matching and uncertainty about how to phrase effective inputs.
- Methods: In-lab study, semi-structured interviews, questionnaire.

“I Prefer Regular Visitors to Answer My Questions”: Users’ Desired Experiential Background of Contributors for Location-based Crowdsourcing Platforms Sept 2021 - June 2023

- Identified key attributes of location-related information and description quality that shape users’ expectations of contributors’ experiential backgrounds, based on an in-depth interview study.
- Demonstrated that certain aspects of experiential background—such as recentness, frequency, and regularity of visits—are universally perceived as enhancing the usefulness of location-related information across contexts.
- Revealed nuanced associations between specific information types, valued description qualities, and contributors’ experiential backgrounds, highlighting how different experiential signals matter for different crowdsourcing needs.
- Methods: Semi-structured interviews, surveys, online experiments.

Screenshot Journey Auditor: A System for Facilitating Analysis of Mobile Media Consumption and Engagement Behavior Based on Screenshot Data June 2022 - Sept 2022

- Developed a web-based system that allows researchers to input mobile screenshot data and visualize segmented media units and detected engagement events across three social media platforms.
- Designed an interactive auditing interface that supports collaborative inspection and correction of detected events, enabling iterative improvement of engagement detection models on researchers’ own datasets.
- Methods: System design and implementation, machine learning–based event detection.