

Jessie Song

Human-Computer Interaction & Social Robotics Researcher

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Research Summary

MSc researcher in Human-Computer Interaction (HCI) and social robotics, studying how social roles, conversational AI, and embodiment shape human–AI relationship formation. Experienced in controlled experiments and mixed-methods HCI research across LLM-based conversational agents, social robotics, health informatics, and immersive environments. Methods include psychometric measurement, effect-size estimation, path and mediation analysis, thematic analysis, interviews, and interactive prototyping.

Education

The Hong Kong Polytechnic University

Hong Kong (SAR)

M.Sc. in Innovative Multimedia Entertainment (Research Specialization), GPA: 3.66

Sep 2025–Jan 2027

○ **Selected coursework:** Creative Programming (A+); Research Methods for Multimedia Entertainment (A); Multimedia Entertainment Theory and Practice (A-); Capstone Project (A-).

○ **Service:** MSc Innovative Multimedia Entertainment Class Representative (2025–2027).

Mahidol University International College

Thailand

B.F.A. in Communication Design with Creative Animation, GPA: 3.72/4.0

Sep 2020–Oct 2024

○ **Academic distinction:** First Class Honours.

○ **Selected quantitative/technical coursework:** Introduction to Computer Programming (A), Practical Mathematics (A), Calculus I (A), Introduction to Logic (A), Introduction to Psychology (B+).

The Chinese University of Hong Kong, Shenzhen

Shenzhen, China

Exchange Student (Computer Science & Information Management), GPA: 3.83/4.0

Aug 2022–Dec 2022

○ **Coursework:** Computer Programming (Python), Information Management.

Honors & Awards

2026: Capstone Funding Scheme & Beijing Delegation Funding, The Hong Kong Polytechnic University.

2025: MSc Innovative Multimedia Entertainment Entry Scholarship, The Hong Kong Polytechnic University.

Publications & Manuscripts

Journal Article: Komalawardhana, N., Euaumpon, N., **Song, Z.**, & Limpanuparb, T. (2025). The virtual periodic table: Pilot development of open-source VR educational resource. *Molecular Catalysis*, 585, 115326. <https://doi.org/10.1016/j.mcat.2025.115326>

Under Revision: Yang, H., Li, Y., & **Song, Z.** (2026). “Only If I’m Not a Burden”: A Dyadic Study of Intergenerational Health Data Sharing in Chinese Families. Manuscript under revision following peer review at *Proceedings of the ACM on Human-Computer Interaction* (PACMHCI), CSCW.

Manuscript in Preparation: **Song, Z.**, et al. (2026). *Peer or Expert? How Conversational Agent Social Roles Shape Generation Z’s Relationship Formation*. First-author manuscript based on a completed pilot study; being revised following external peer review.

Research Experience

Research Laboratory for Advanced Social Robotics

Research Intern

Hong Kong (SAR)

July 2026–Present

UGC Theme-based Research Scheme context

- Contributing to the UGC-funded Theme-based Research Scheme project *Social Robots with Embedded Large Language Models Releasing Stress among the Hong Kong Population* (Grant No. T43-518/24-N).

Project: Embodied Social Roles & Human-Robot Relationship Formation (Ongoing)

- Extending first-author conversational-agent research to embodied HRI, examining how social-role framing and physical embodiment shape relationship formation and engagement with AI.
- Developing the experimental protocol for an LLM-enabled physical social robot; NAO is currently under consideration as the embodiment platform.

Project: Peer vs. Expert Conversational-Agent Social Roles (OzCHI 2026 submission)

- Designed and conducted a between-subjects pilot study ($N=20$) with Generation Z participants in Hong Kong, comparing Peer versus Expert role framing using theoretical frameworks.
- Operationalized relationship formation through structured self-disclosure, and semi-structured interview tasks; analyzed psychometric reliability, Hedges' g effect sizes with bootstrapped 95% confidence intervals, and exploratory covariate associations.

PolyU-Nvidia Joint Research Centre

Research & Development Intern

Hong Kong (SAR)

Sep 2025–June 2026

Project: Intergenerational Health Data Sharing Technology (Dec 2025–Jun 2026)

- Contributed to a qualitative dyadic study with 17 Chinese intergenerational family pairs, including participant interviews and reflexive thematic analysis; this work resulted in a third-author PACMHCI (CSCW) manuscript currently under revision following peer review.

Project: VR UX Research & Immersive Environments (Sep 2025–Dec 2025)

- Developed and troubleshoot high-fidelity VR prototypes in Unity and Unreal Engine 5 with HTC Vive.
- Designed eye-tracking-based behavioral data collection to examine gaze and immersion.

Mahidol University

Research Assistant

Thailand

Jul 2024–Jul 2025

- Researched automated 3D-model generation for educational VR/AR and contributed to prototype scripting, optimization, and development. Contributed to research that resulted in a peer-reviewed publication on an open-source virtual periodic-table VR educational resource.

Selected Projects & Leadership

BeeCare (Social-Care SaaS Startup)

Lead R&D and Co-Founder

Hong Kong (SAR)

Nov 2025–Present

- Led user research and service design for an AI-assisted workflow platform intended to reduce administrative load in elderly and social-care services.
- Applied contextual inquiry, modified Delphi methods, focus groups, user-journey mapping, and high-fidelity prototyping to translate social-work requirements into product features.
- Capstone Project Funding Scheme, in addition to Funding Support to Beijing Delegation.

Mahidol University

Project Leader

Thailand

Jun 2023–Feb 2024

38th Anniversary Systematic Brand Architecture

- Led a cross-disciplinary team to develop a modular university-wide design system spanning animated assets, original IP, and multi-platform brand applications. Produced a scalable branding toolkit adopted across university collateral and recruitment media.

Research Skills

Quantitative: Between-subjects experimental design; effect-size estimation (Hedges' g , bootstrap confidence intervals); psychometric reliability; correlation analysis; path and mediation analysis (PROCESS/SPSS); eye-tracking data collection.

Qualitative: Thematic analysis; semi-structured interviews; co-design interviews; contextual inquiry; modified Delphi method; focus groups.

Programming: Python, R, Unity C#.

Tools: SPSS, Unreal Engine 5, Blender, Figma, Webflow.

Languages

English (Fluent; IELTS 8.0), Mandarin (Native), Thai (conversational)