T. James Brandt

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Education

University of Minnesota – Twin Cities, Minneapolis, MN

- **M.S., Human Factors & Ergonomics** (GPA: 4.0/4.0) Sep 2025
- Thesis: *Multimodal Anthropomorphism in Companion Chatbots: Examining Avatar Choice and Adaptive Language Style with Kagami*
- **B.S., Interdisciplinary Design & Psychology** (GPA: 3.76/4.0) Jan 2023

Prior Undergraduate Study: Lawrence University; Minnesota & Washington Community Colleges 2014–2020

Research Experience

Principal Investigator, Designer, & Developer *Jun 2024–Sep 2025*
University of Minnesota, Minneapolis, MN

- Built a full-stack research platform (React, FastAPI, GPT-4) to run controlled HAI experiments.
- Designed a preregistered 3×2 experiment (N=162) on avatar customization and linguistic adaptation for companion chatbots.
- Found evidence for an "Adaptation Paradox," where algorithmic mimicry reduced perceived adaptiveness while user-generated avatars improved rapport.

Graduate Research Assistant, Conversational AI *Sep 2024–May 2025*
College of Design, University of Minnesota, Minneapolis, MN

- Led user-centered design research for a health education LLM; conducted 15+ semi-structured interviews and thematic analysis to define core requirements.

Graduate Research Assistant, Preschool Plates NIH R01 Study *Sep 2023–May 2025*
Medical School, Univ. of Minnesota, Minneapolis, MN

- Managed and analyzed longitudinal datasets in R and Python for a large NIH-funded cohort study.
- Led recruitment/data collection for 225+ parent–child dyads, maintaining ∼90% retention with HIPAA protocol adherence.

UX Research Assistant, Cardiac Anesthesia Pedagogical Platform *May 2022–Jan 2023*
College of Design & Medical School, Univ. of Minnesota, Minneapolis, MN

- Conducted contextual inquiry and needs assessment with medical residents to inform a training platform design.

Publications

Journal Articles

- Loth, K. A., Wolfson, J., Barnard, M., Hogan, N., **Brandt, T. J.**, Fulkerson, J. A., & Fisher, J. O. (2025). Examining the Longitudinal Impact of Within- and Between-Day Fluctuations in Food Parenting Practices on Child Dietary Intake: Protocol for a Longitudinal Cohort Study. *JMIR Research Protocols, 14*, e73276. DOI

Under Review

- **Brandt, T. J.**, & Wang, C. X. (2025). *The Adaptation Paradox: Agency vs. Mimicry in Companion Chatbots.* Under review at *ACM CHI 2026*. Preprint: arXiv:2509.12525
- **Brandt, T. J.** (2025). *Navigating the Synchrony–Stability Frontier in Adaptive Chatbots.* Under review at *ACM IUI 2026*. Preprint: arXiv:2510.00339
- **Brandt, T. J.** (2025). *Kagami: A Research Platform for Studying Multimodal Personalization in Conversational Agents.* Under review at *JOSS*.

Thesis

- **Brandt, T. J.** (2025). *Multimodal Anthropomorphism in Companion Chatbots: Examining Avatar Choice and Adaptive Language Style with Kagami.* Master's Thesis, University of Minnesota, Twin Cities.

Industry Experience

Design Strategist *Oct 2025–Present*
Johns Hopkins University Applied Physics Laboratory (APL), Laurel, MD

Human-Centered Design & Engineering Intern *May 2025–Sep 2025*
Johns Hopkins University Applied Physics Laboratory (APL), Laurel, MD

UX Designer & Researcher *Jun 2019–Sep 2021*
Jones Jones LLC, New York City, NY

Presentations

- **Brandt, T. J.** (2025). *Kagami: An Adaptive AI Companion for Research.* dmi: New Voices Conference, Washington, D.C.
- Wang, C., & **Brandt, T. J.** (2025). *Designing AI with a Human-Centered Lens.* dmi: New Voices Conference, Washington, D.C.

Teaching & Mentoring

Invited Guest Lecturer, Senior Design Portfolio Course *Spring 2025*
University of Minnesota, Minneapolis, MN

Honors & Awards

- University of Minnesota Dean's List 2021–2023
- Assorted Academic Scholarships, University of Minnesota 2021–2023

Service & Community Engagement

Youth Program Volunteer *Fall 2023*
Ginew/Golden Eagles Program, Minneapolis American Indian Center, Minneapolis, MN

Community COVID-19 Vaccination Clinic Volunteer *Jan–Mar 2021*
M Health Fairview, Minneapolis, MN

Certifications & Training

Certified Paralegal *2019*
Seattle Central College, Seattle, WA

Technical Skills

- **Programming:** Python (Pandas, NumPy, scikit-learn, statsmodels), R (tidyverse, lme4), JavaScript (React, Vite)
- **Research Methods:** Experimental Design (Preregistered), ANOVA/LM/GLM, Thematic Analysis, Usability Testing, Contextual Inquiry, Survey Design (Qualtrics, REDCap)
- **Frameworks & Tools:** FastAPI, Git/GitHub, Figma, Qualtrics, Prolific
- **Open Science:** Zenodo, OSF, OpenAI/Anthropic/Google AI APIs