Yifan Niu

Curriculum Vitae

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Research Interests

My research interests lie in understanding how people perceive, interpret, and respond to AI systems, and how these systems in turn shape their social relationships and behaviors. Through empirical studies, I aim to inform the design of AI systems that support long-term human well-being.

Keywords Human–AI Interaction, Human–AI Relationships, AI Identity and Relational Continuity, Responsible Generative AI, Social Computing, Behavioral Experiments, Mixed-Methods Research

Education

2025–2027 **B.S. in Computer Information Science**, *Cornell University*, Ithaca, NY, *GPA: 4.09/4.00*
Cornell Bowers CIS & CALS · Expected May 2027
Courses: UI/UX Design, HCI, Computer-Mediated Communication, Human–AI Interaction, Computing, OOP, Data Structures, Networks, Statistics

2023–2025 **B.S. in Mathematics of Computation**, *University of California, Irvine*, Irvine, CA, *GPA: 3.907/4.00*
Courses: Linear Algebra, Calculus, Boolean Logic & Discrete Structures, HCI, Programming

Publications

2026 Eun Jeong Kang, Yadi Wang, Jane Im, **Yifan Niu**, and Susan R. Fussell. "Positive Content is A Default Yes": Competing Claims to Consent for Likeness Use between AI Video Creators and Social Media Influencers. Submitted to *CHI 2027* (Major Revision; passed first-round review).

Honors & Awards

Nov 2026 CALS Undergraduate Research Funding Award, Cornell University, for *Understanding Identity Discontinuity in AI Companions Following Model Updates*

Research Experience

2026–Present **Undergraduate Researcher**, *Cornell University*, Ithaca, NY
Understanding Identity Discontinuity in AI Companions Following Model Updates · Advisor: Prof. Susan R. Fussell · Funded by the CALS Undergraduate Research Funding Award

- Conducting an independent qualitative study of relationships with AI companions, examining which aspects of AI companionship users value and how changes to these aspects affect their experiences and responses.
- Identified major model updates and service discontinuations, then used event-specific time windows, targeted searches, relevance screening, and purposive sampling to select approximately 500 posts from five AI-companion subreddits for inductive open coding.
- Preliminary analysis suggests users draw on different criteria to judge an AI companion's identity (the underlying model, shared memories, personality, or familiar interaction patterns) and develop folk theories about model updates, memory mechanisms, and platform decisions to explain these changes.
- Refining the analysis around three dimensions (how users perceive and interpret changes, how they judge identity continuity, and how they experience and respond to changes) to develop a conceptual framework explaining why similar technological changes may be associated with different experiences of identity continuity and discontinuity.
- Exploring future research directions involving the design and evaluation of AI agents that support users through AI companion updates, while balancing relational continuity, user autonomy, and long-term well-being.
- Preparing a submission to the CHI 2027 Student Research Competition (January 2027).

May–Sep 2026 **Researcher**, *Cornell University*, Ithaca, NY

"Positive Content is A Default Yes": Consent for Likeness Use between AI Video Creators and Social Media Influencers · Advisor: Susan R. Fussell · Research Lead: Eun Jeong Kang · Sole undergraduate researcher on the team

- Investigated how AI video creators and social media influencers understand consent for AI-generated likeness use through semi-structured interviews with 31 participants (17 creators, 14 influencers).
- Contributed to participant recruitment, interview observation, qualitative coding, and quantitative analysis.
- Reviewed and refined ambiguous qualitative codes, shifting the analysis from whether participants approved of a given use to the reasoning behind their judgments.
- Identified a consent gap: 11 influencers opposed unauthorized fan use of their likeness, yet only 3 creators reported having sought permission; creators judged legitimacy by whether content was positive or harmless, whereas influencers emphasized consent and control over their representation.
- Contributing to the manuscript revision following a Major Revisions decision at CHI 2027.

Jan 2026–Present **Researcher**, *Cornell University*, Ithaca, NY

Effects of Gender and Racial Representation in AI-Generated Occupational Images · Advisor: Susan R. Fussell · Collaborator: Jingruo Chen · Research in progress

- Audited three image-generation models across twelve occupations to examine gender and racial representation in AI-generated occupational images.
- Conducted a randomized 2×2 experiment manipulating gender and racial representation to test how AI-generated images shape occupational perceptions; contributed to the literature review, survey design, recruitment, and quantitative analysis.
- Found that greater female representation was associated with higher ratings of how valued participants believed their own gender group would be in an occupation, suggesting AI-generated content may shape social perceptions rather than simply mirror existing biases.
- Conducting a follow-up study with behavioral measures, including voluntary career exploration and time spent seeking career-related information, to test whether shifts in perceived inclusion translate into actual decisions.

Aug–Dec 2025 **Research Assistant**, *Cornell University*, Ithaca, NY

Acoustic-Based Wearable Technology for American Sign Language Communication · Research Supervisor: Chen Zhang

- Assisted in developing an ASL communication system integrating wearable sensing for fingerspelling recognition and acoustic-based facial movement tracking.
- Implemented software modules for device operation and sensor data collection.
- Conducted recognition accuracy evaluations and data analysis to assess the wearable interface.
- Supported integration and testing of word-level recognition and non-manual signals, including facial expressions relevant to ASL.

Jun–Aug 2024 **Developer and Researcher**, *Peking University, Institute for Artificial Intelligence*, Beijing, China

AI-Driven Automatic Cinematic Camera Control · Research Supervisor: Yizhou Wang

- Developed cinematic camera control methods combining reinforcement learning and diffusion models to generate camera trajectories in virtual environments.
- Applied transformer-based architectures to model temporal dependencies in camera movement, improving the smoothness and coherence of generated sequences.
- Created 10+ realistic 3D environments with UnrealCV and CAD-based assets to simulate filming scenarios and evaluate algorithms.
- Deployed trained models to AWS EC2 with Docker and built automated testing and deployment workflows for reproducible experiments.

Skills

Qualitative	Semi-structured interviews, open coding, codebook development and refinement, online community discourse analysis, purposive sampling
Quantitative	Factorial experimental design, survey design, AI model auditing, statistical analysis, data visualization
Programming	Python (pandas, statsmodels), R, C, C#, JavaScript, MATLAB, HTML/CSS, LaTeX
Tools	Qualtrics, SPSS, MAXQDA, Figma (prototyping), Unity, Arduino IDE, Docker, AWS
AI & ML	Reinforcement learning, diffusion models, transformers
Languages	Mandarin Chinese (native), English (fluent), Japanese (elementary)
Interests	Photography, screenwriting, fiction and creative writing