YANYI CHEN

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RESEARCH INTERESTS

Computational Psychology, Decision Making, & Cognitive Science

EDUCATION

University of Chicago | Chicago, IL   **August 2025**
Master of Arts, Social Sciences; Concentration: Psychology - STEM
Certificate: Computational Social Science
Thesis: Gender Identity and Aesthetic Perception: Investigating Shared Product Evaluations Within and Across Gender Groups
Advisor: Dr. Daniel Albohn
Relevant Coursework: Machine Learning, Agent-Based Modeling, Managerial Decision Making

Rutgers University, The State University of New Jersey (RU) | New Brunswick, NJ   **May 2024**
Bachelor of Arts, Psychology; Minors: Data Science & Cognitive Science
Capstone Project: Data Analysis and Visualization in R
Advisor: Dr. Tomasz Imielinski
Relevant Coursework: Cognition and Decision Making, Cognition

PAPERS & PRESENTATIONS

Papers

Chen, Y. *Gender Identity and Aesthetic Perception: Investigating Shared Product Evaluations Within and Across Gender Groups* [Unpublished manuscript]. Division of the Social Sciences, University of Chicago

Song, X., Wu, M., Zhu, K. Q., Zhang, C., & **Chen**, Y. (2025). A cognitive evaluation benchmark of image reasoning and description for large vision-language models. *Proceedings of the 2025 Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics: Human Language Technologies (Volume 1: Long Papers)*, 6392–6409. https://doi.org/10.18653/v1/2025.naacl-long.324

Li, Z.*, **Chen**, Y*., Li, C., Chen, S., Zhu, K.Q., Wu, M., Xie, D. *How to Break the Ice with Depressed Social Media Users: A Prerequisite of a Proactive Mental Health Chatbot* [Under review]. Department of Computer Science and Engineering, Shanghai Jiaotong University.

Chen, S., Ming, C., Zhang, Z., **Chen**, Y., Zhu, K.Q., Wu, M. *Mixed Chain-of-Psychotherapies for Mental Health Support Chatbot* [Under review]. Department of Computer Science and Engineering, Shanghai Jiaotong University

Presentations

Chen, Y. (2025, August 6). *Is Beauty Shared?* [Final Project Presentation]. Ipsos Micogrant Program Awardee Presentation, Chicago, IL.

Chen, Y. (2025, June 3). *Is Beauty Shared?* [Conference Presentation]. The 10th Annual MA Interdisciplinary Research Graduate Conference, Chicago, IL

RESEARCH EXPERIENCE

Perception and Judgment Lab | University of Chicago | Chicago, IL   **2024 - Present**
Research Assistant / Graduate Researcher – Dr. Alexander Todorov , Distinguished Service Professor of Behavioral Science.
Designed and conducted a quantitative study investigating how gender identity shapes aesthetic perception and consumer preferences toward product packaging.
- Created and distributed a Qualtrics questionnaire collecting open-ended judgments and quantitative ratings.
- Applied NLP, PCA, and mixed-effects modeling to analyze perceptual and social identity effects.
- Designed and conducted a quantitative study investigating how gender identity shapes aesthetic perception and consumer preferences toward product packaging.

Group of NLP in Mental Health | Shanghai Jiaotong University | Shanghai, CN   **2023 - Present**
Research Assistant – Dr. Kenny Qili Zhu (Currently at UTA) & Dr. Mengyue Wu, Professors of Computer Science and Engineering.
A Cognitive Evaluation Benchmark of Image Reasoning and Description for Large Vision Language Models:
Reviewed literature on dementia image diagnosis, identified dataset limitations, and annotated new image materials to build a benchmark improving AI models' ability to interpret cognitive diagnostic imagery. Paper accepted at NAACL

2025.

Mixed Chain-of-Psychotherapies for Mental Health Support Chatbot:
Reviewed literature on therapist–patient empathy strategies and translated them into prompt-based model tuning to improve emotional dialogue capabilities, contributing to the theoretical framing of the paper.

How to Break the Ice with Depressed Social Media Users: A Prerequisite of a Proactive Mental Health Chatbot:
Developed and tested a pipeline for proactive engagement with depressed users on social media, designing and evaluating multiple response strategies across human and robot roles. Built a supporting user dataset and co-authored the interactive experiment section of the paper.

Cognitive Development Laboratory | Rutgers University | New Brunswick, NJ   **2023 - 2024**
Research Assistant - Dr. Alan Leslie, Distinguished Professor of Psychology
Worked on projects examining how inhibitory demands affect children's performance on false-belief and related t asks, developing strong skills in experimental design, data analysis, and participant management.

- Designed and conducted behavioral experiments with 300+ child participants, creating stimuli and managing recruitment and scheduling.
- Collected, coded, and analyzed behavioral data using R and Excel, applying multiple and logistic regression as well as McNemar's test.
- Trained new research assistants and maintained laboratory data systems and materials.

RELEVANT COURSEWORK

User Experience Research on Instagram and Fidelity Platforms | University of Chicago| Chicago, IL
Course: UX Research Foundations & Exploratory Research Design (MAPSS)

- Conducted semi-structured interviews with platform users to gather insights on user engagement and platform usability.
- Analyzed qualitative data to identify user needs and provide actionable recommendations to improve platform design and user retention.
- Collaborated with team members to prepare a comprehensive report for platform stakeholders, emphasizing strategic improvements based on user feedback.

Organizational Behavior Study on Google Teams | University of Chicago| Chicago, IL
Course: Managing in Organizations (Booth School of Business)

- Interviewed Google employees to identify current challenges within team dynamics and communication.
- Synthesized findings to propose evidence-based interventions aimed at enhancing team productivity and collaboration.
- Co-authored a final paper presenting research results and practical recommendations for organizational improvements.

PROFESSIONAL EXPERIENCE

FlyClub Angels & Naoyun Technology | Shanghai, CN   **June 2024 - August 2024**
Internship

- Prepared and organized the "SheShan Brain Valley" closed-door meeting, inviting over 23 entrepreneurs, investors, law firms, and others in the brain-machine interface field, including the town mayor. Completed a 2500-word, 5-hour meeting summary.
- Used in-ear EEG earbuds for measurements, collected open/closed eye paradigm data, and performed waveform analysis using MATLAB. Ran ASSR paradigm and other paradigms to ensure the reliability and validity.
- Collected and compiled financing and industry information related to brain-machine interface field, producing weekly update.

Shanghai Sixth People's Hospital | Shanghai, CN   **June 2023 – August 2023**
Psychological Counselor Assistant (Intern, 40 working hrs.+/week)

- Guided group members (3-4) through structured scripts provided by consultants using psychodrama techniques such as role-playing, mirroring, and directing. Discovered self-advantages, self-support, supporting others, and identifying others' strengths to enhance self-esteem and empathy.
- Measured participants' heart rate and stress index using a pulse oximeter before and after group sessions, analyzed data, and found a significant reduction in abnormal heart rates (from 6-185 to below 5, within the normal range).
- Designed and distributed post-session questionnaires, with feedback indicating decreased depression levels after completing 12 sessions; many participants successfully returned to campus, improving self-awareness and self-support capabilities.

SERVICE & LEADERSHIP

Student Member, American Psychological Association,	September 2024 – Present
Volunteer Teacher, Datieqiao Primary School	March 2021 – June 2021

AWARDS & HONORS

Ipsos Microgrant	2025
Midway Research Scholarship	2024
Matthew Leydt Society (top 2%)	2024
Phi Beta Kappa	2023 - Present
SAS Excellence Scholarship	2021 - 2024

RELATED SKILLS

- Research Skills: Research Design, Social Science Analysis Academic and Professional Writing
- Quantitative / Computational Knowledge: Data Wrangling and Management, Statistical Inference, Machine Learning, Natural Language Processing (NLP), Web Scraping, Cleaning & Coding, Data Visualization
- Technical: R, Python, Psychopy, Qualtrics, Tableau, Office 365 (Word, Excel, PowerPoint), LaTeX, MATLAB, Gorilla Experiment Builder
- Languages: English (Fluent), Mandarin (Native), German (Basic), French (Basic)

REFERENCE

Dr. Alan Leslie, *Distinguished Professor of Psychology*, aleslie@ruccs.rutgers.edu

Dr. Hannah Hamilton, *Assistant Instructional Professor of Psychology*, hhamilton@uchicago.edu

Dr. Daniel Albohn, *Principle Researcher*, Daniel.Albohn@chicagobooth.edu

Dr. Kenny Zhu, *Professor of Computer Science and Engineering*, kenny.zhu@uta.edu