Yilin Wu

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Education

Nanjing University (NJU) | Bachelor | School of Social and Behavioral Sciences | Sep. 2022 - Jun. 2026

- Department of Psychology
- GPA: 4.64/5.00 (92.8/100), Ranking 1/26
- Relevant Courses: Cognitive Psychology, Developmental Psychology, Machine Learning, Neurobiology, Biological Psychology, Social Psychology, Python Programming, Experimental Psychology, Psychological Statistics

University of California, Berkeley | Berkeley International Study Program

Jan. 2025 – May. 2025

- GPA: 4.00/4.00
- Relevant Courses: Methods in Computational Modeling for Cognitive Science (Graduate-Level, Grade: A), Special Topics in Cognitive Science: Models of Decision-Making From Brain to Behavior (Grade: A)

Awards & Honors

National Innovation Training Program – Outstanding Achievement (Highest Honor)	Jan. 2025
First Prize in Renmin Scholarship	Nov. 2024
First Prize in Renmin Scholarship	Nov. 2023
Third Prize in National English Report Contest Simulating International Conference	Sep. 2023

Research Interests

Cognitive Psychology & Cognitive Modeling

• Mental Representations | Exploration | Computational Approaches | Aligning Human Behaviors with Algorithms | Human-Artificial Intelligence Social Interaction

Research Experience

Ji Lab, Chinese Institute for Brain Research, Beijing (CIBR)

July. 2024 –

Research Intern

Advisor: Dr. Ni Ji

• Research on Human Exploration and Function Learning in High-Dimensional Spaces

Center for Brain Disease and Cognitive Science, Shenzhen University

Jan. 2024 – June. 2024

Research Intern

Advisor: Prof. Zhenhong He

 \bullet Research on Neuromodulation Interventions for Emotion Regulation

Human-AI Social Interaction and Spatial Cognition Lab, NJU

Sep. 2023 – Sep. 2024

Research Volunteer

Advisor: Prof. Chengli Xiao

• Research on Human-Artificial Intelligence Social Interaction

Conference Contribution

Poster Presentation

An, J., Hu, J., Wu, Y.E., Ning, S., Zhu, F., Pan, Y., & Ji, N*. (2025, August). Task-space dimensions guide human exploration in complex environments. Poster presented at the 8th Annual Conference on Cognitive Computational Neuroscience (CCN), Amsterdam, Netherlands.

Research Projects

Human Exploration and Function Learning in High-Dimensional Spaces

June. 2024 -

- Took a leading role for designing, coding and troubleshooting the experimental paradigms, focusing on human processes of dimensionality reduction and exploration in high-dimensional spaces.
- Leading in modifying existing models for simulation and data fitting, and also contributed to the design of a model for efficient exploration in complex environments.
- Presented poster as a main contributor in CCN2025 conference, Amsterdam.

fMRI Data Analysis in the Context of Emotion Regulation

Jan. 2024 – June. 2024

• Mastered the operation and programming method of fMRI data pre-processing including region of interest (ROI) analysis. Accomplished mass data analysis tasks based on learning.

Mechanisms of Gender Antagonistic Emotional Arousal Online

Nov. 2023 – Dec. 2024

- Mainly responsible for experimental design to mimic online interaction to collect responses to manipulated commentaries.
- Executed two online experiments and analyzed data thoroughly, leading to the successful project completion.
- Project recognized as Outstanding Achievement (highest honor) under the National Innovation Training Program.

Human-Computer Social Interaction under Job Replacement Threat

Sep. 2023 – Sep. 2024

• Developed an innovative and efficient game paradigm modeling workplace situations to explore behavioral differences between human-human and human-machine cooperation/competition.

Course Projects

Case Study on 3D Cognition and Memory Construction in Children

Oct. 2024 - Dec. 2024

Course: Developmental Psychology (Personal Project)

- Designed a comprehensive longitudinal study to compare the impact of active/passive and motor/verbal learning strategies on 3D memory construction in a children aged 6.
- Revealed the vital role of contextual imagination and emerging top-down cognitive mechanisms in early childhood development.
- Published as an outstanding project in the school journal.

Revision of the HSN&DTD Scales based on Variable Networks

Oct. 2024 – Jan. 2024

Course: Psychometrics (Group Project)

- Conducted data analysis using R, including reliability and validity analysis, as well as comprehensive network analysis to explore the relationships between items on the two scales.
- Proposed revision suggestions and identified the core variables of the two scales.

Metacognition and Academic Achievement:

A Meta-Analysis of Students in Primary and Secondary Education

Sep. 2024 – Nov. 2024

Course: Educational Psychology (Group Project)

• Conducted a meta-analysis of 33 studies (46,634 participants) to examine the relationship between metacognition and academic achievement in basic education, identifying key moderating factors such as region and subject type.

Technical Skills

Programming Languages: Python (Proficient), R (Familiar), HTML/CSS/JavaScript

Data Analysis Tools: SPSS Statistics, SPM (Matlab), Comprehensive Meta-Analysis (CMA)

Experimental Design Tools: PsychoPy (Proficient), JsPsych (Familiar)

Development Tools: PyCharm, Visual Studio Code, GitHub

Language Proficiency

English Proficiency: TOEFL 112/120 (R 27, L 29, S 27, W 29)