

# Will Deng

(Wuyizhe Deng)

603 E Daniel St

Champaign, IL 61820

wuyizhe2@illinois.edu

## EDUCATION

---

**University of Illinois Urbana-Champaign** Champaign, IL **2022-Present**  
*Doctor of Philosophy in Cognitive Psychology (pursuing)*

**University of Illinois Urbana-Champaign** Champaign, IL **2022-2024**  
*Master of Science in Psychology*

**Furman University** Greenville, SC **2018-2022**  
*Bachelor of Science in Psychology, Summa Cum Laude*  
*Bachelor of Arts in English*  
*Minor in Data Analytics*  
Cumulative GPA: 3.92/4.0 | Major GPA: 3.97/4.0

## ACADEMIC ACHIEVEMENTS & AWARDS

---

- UIUC Graduate College Mentoring Certificate **2024**
- UIUC Psychology Grad Fellowship **2023-2024**
- Phi Beta Kappa Society Member **2022**
- Brewer Scholarship in Psychology **2022**
- Odell Scholarship **2021**
- Cover Award, Best Talk at Furman Psychology Summer Research Conference **2021**
- Furman Advantage 2021 Research Fellowship **2021**
- Psi Chi International Honor Society in Psychology Member **2021**
- Sigma Tau Delta International English Honor Society Member **2020**
- Dr. J. Decherd Guess Scholarship **2020**
- Odell Scholarship **2020**
- Furman Advantage 2020 Research Fellowship **2020**
- Phi Eta Sigma National Honor Society Member **2019**
- Dean's List (All semesters)

## PUBLICATION

---

Deng, W., Kellen, D., Hotaling, J. M. (2024). Toward the cognitive modeling of dynamic decision making. Submitted.

- Deng, W., Beck, D. M., & Federmeier, K. D. (2024). Image memorability is linked to facilitated perceptual and semantic processing. Submitted
- Deng, W., Federmeier, K. D., & Beck, D. M. (2024). Highly memorable images are more readily perceived. *Journal of Experimental Psychology: General*, 153(6), 1415-1424. <https://doi.org/10.1037/xge0001594> [Selected as APA Editor's Choice paper]
- Deng, W., Rosenblatt, A. K., Talhelm, T., & Putnam, A. L. (2023). People from the U.S. and China think about their personal and collective future differently. *Mem and Cognition*. <https://doi.org/10.3758/s13421-022-01344-9>
- Putnam, A. L., Deng, W., & DeSoto, K. A. (2022). Confidence ratings are better predictors of future performance than delayed judgments of learning. *Memory*. <https://doi.org/10.1080/09658211.2022.2026973>

## **POSTERS & PRESENTATIONS**

---

- Deng, W., & Benjamin, A. S. (2024). Metacognitively calibrated AI encourages advice utilization. Poster at the Psychonomic Society 65<sup>th</sup> Annual Meeting, New York City, NY.
- Hotaling, J. M., Kellen, D., & Deng, W. (2024). Models of planning in dynamic decision making. Talk at the Psychonomic Society 65<sup>th</sup> Annual Meeting, New York City, NY.
- Hotaling, J. M., Kellen, D., & Deng, W. (2024). Models of planning in dynamic decision making. Talk at the Virtual MathPsych/ICCM 2024.
- Deng, W., Federmeier, K., & Beck, D. (2024). Highly memorable images are easier to perceive. Poster at the 2024 Vision Sciences Society Annual Meeting, St. Pete Beach, Florida.
- Deng, W., Federmeier, K., & Beck, D. (2023). Image memorability: Connection between perceptual and semantic processing. Talk at Cognitive Psychology Brownbag, University of Illinois Urbana-Champaign.
- Deng, W., Federmeier, K., & Beck, D. (2023). Image memorability affects ability to perceive low-level visual features. Talk at Language Processing Brownbag, University of Illinois Urbana-Champaign.
- Putnam, A. L., Deng, W., Rosenblatt, A., & Talhelm, T. (2023) People from the US and China think about their personal and collective future differently. Symposium at the Meeting of the Society for Applied Research in Memory and Cognition, Nagoya, Japan.
- Putnam, A. L., Deng, W., & Talhelm, T. (2021). Chinese and American subjects think about the collective past and future differently. Poster presented at the Psychonomic Society 62nd Annual Meeting, Virtual Conference.
- Deng, W., Rosenblatt, L., Talhelm, T., & Putnam, A. L. (2021). A utopian life in a dystopian country: Valence dissociation between personal and collective future thoughts in the us vs china. Talk at the summer research conference of Furman psychology department, Greenville, SC.
- Gary, S. R., Deng, W., Greenfield, N., & Putnam, A. L. (2021). The Mandela effect: Four ways to measure collective false memories. Poster presented at the 2021 APS Virtual Convention and Poster Showcase.

Gary, S. R., Deng, W., Greenfield, N., & Putnam, A. L. (2021). The Mandela effect: Four ways to measure collective false memories. Poster presented at the 13th Annual Furman Engaged, Greenville, SC.

## **RESEARCH EXPERIENCE**

---

**UIUC Cognition and Brain Lab** | Dr. Kara Federmeier

*PhD Research*

Number Processing (funded by *Sandia National Laboratories*) **Spring 2024-Present**

- Tested people's ability to process small numbers (e.g., 0.000036) separately in decimal and scientific notation formats on Prolific

Word Memorability Event-Related Potentials (ERP) **Fall 2023-Spring 2024**

- Collected norming data for word memorability on Prolific
- Analyzed the connection between word memorability, neighborhood size, and N400 ERP components

**Collaboration Between UIUC Attention and Perception Lab** | Dr. Diane Beck &

**UIUC Cognition and Brain Lab** | Dr. Kara Federmeier

*PhD Research*

Image Memorability Event-Related Potentials (ERP) **Spring 2023-Fall 2023**

- Investigated how the perceptual and semantic processing related to image memorability are reflected in the N300 and N400 ERP components in two experiments
- Coded and administered the experiment on PsychoPy
- Administered EEG recording with the help of research assistants

Image Memorability and Perception **Fall 2022-Spring 2023**

- Investigated how image memorability affects people's ability to perceive lower features of images
- Created visual stimuli from online database and coded an experiment on PsychoPy with adaptive staircase algorithm and intact-scrambled paradigm
- Administered the study in person with the help of research assistant
- First-author paper published in *Journal of Experiment Psychology: General*

**UIUC Human Memory and Cognition Lab** | Dr. Aaron Benjamin

*Thesis Advising*

Human-AI Interaction **Spring 2024-Present**

- Supervised an undergraduate thesis where the student crafted a frequency judgment test with word stimuli to test the effect of AI metacognitive calibration on human-AI integration in a memory-based task

*PhD Research*

Human-AI Interaction

**Fall 2022-Fall 2023**

- Examined how AI assistant may improve human performance in a difficult task when AI generates and displays either highly or poorly calibrated metacognitive confidence judgment towards its own advice in two experiments
- Coded experiments using jsPsych and PsychoPy with a grid perception task
- Administered the experiments in person with the help of research assistant

**UIUC Cognitive Decision Making Lab | Dr. Jared Hotaling**

*PhD Research*

Dynamic Decision-Making

**Fall 2022-Present**

- Examined dynamic decision-making process by controlling dominant structure and expected utility under the context of economic models and Decision Field Theory
- Coded decision tree experiments using JavaScript, HTML, and CSS
- Administered the experiments in person with the help of research assistants
- Programmed computational models to test the strategies used in the decision-making process

**Furman Body Image and Disordered Eating Prevention Lab | Dr. Kerstin Blomquist**

*Research Assistant*

Supervised Research

**Spring 2021**

- Examined the dimensionality of the Eating Loss of Control Scale in a non-clinical sample
- Wrangled data across multiple years for analysis in excel and SPSS
- Collected and summarized past research directly on or related to the Eating Loss of Control Scale to form a manuscript

**Furman University Memory Lab | Dr. Adam Putnam**

*Research Assistant*

Senior Thesis

**Fall 2021**

- Extended past lab research on collective future thought
- Focused on finding a mechanism with which people form collective memory
- Wrote and defended a research proposal for the psychology department faculty

Summer Undergraduate Research

**Summer 2021**

- Conducted research on collective future thought
- Investigated the generalizability of differences between personal and collective future thoughts in China and the US and tested potential explanations for the differences
- Designed experiments, collected, coded, and analyzed data
- First author on manuscript; revised and resubmitted to *Memory & Cognition*

Supervised Research

**Fall 2020**

- Project involved comparing the metacognitive judgment accuracy between judgement of learning (JOL) and retrospective confidence rating for the retrieval of materials in intro psychology textbooks
- Designed and conducted an experiment for the study and analyzed data
- Co-authored a paper with Dr. Putnam, published in *Memory*

Summer Undergraduate Research

**Summer 2020**

- Investigated collective false memory, examined characteristics of the Mandela Effect
- Conducted literature review, designed experiments, developed and administered experiments in Qualtrics, and analyzed data
- Learned to code in R and used Rstudio to manipulate and analyze data
- Wrote a manuscript with three other lab members

Supervised Research

**Spring 2020**

- Conducted literature review and designed experiment on the Deese-Roediger-McDermott (DRM) Task and the production effect
- Wrote a proposal for the project with intro and method sections

## **TEACHING EXPERIENCE**

---

**Intro to Psychology | UIUC**

**Fall 2023**

*Graduate Teaching Assistant (Lecturer)* under Dr. Lisa Travis

- Gave lectures and held office hours
- Graded exams and homework assignments

**Cognitive Psychology | UIUC**

**Fall 2022**

*Graduate Teaching Assistant* under Dr. Lili Sahakyan

- Held office hours to answer class-related questions and go over exams
- Administered and graded exams

**Research Methods & Statistics | Furman University**

**Spring 2021-Spring 2022**

*Teaching Assistant* under Dr. Cinnamon Stetler, Dr. Erin Hahn, and Dr. Adam Putnam

- Answered general questions regarding the class materials
- Reviewed and edited research papers
- Hosted review sections before exams
- Helped to find relevant materials such as research articles for the class

**Various Classes | Furman University**

**Spring & Fall 2019**

*Academic Tutor* at the Center for Academic Success

- Met with students one-on-one to help answer questions regarding class materials and homework and review for exams

## **LEADERSHIP & SERVICE**

---

- UIUC Student Advising on Graduate Education (SAGE) Board Member **Fall 2024-Present**
- Representing UIUC Cognition and Brain Lab at Beckman Institute Open House **Spring 2024**
- Hosting reading groups with undergrad research assistants on ERP literature **Spring 2024**
- Representing UIUC Attention and Perception Lab at Beckman Institute Open House **Spring 2023**
- UIUC Department of Psychology Diversity Committee Member **Fall 2022-Spring 2023**
- Psychology/Neuroscience Student Advisory Board Member **Fall 2021- Spring 2022**
- Furman Cultural Life Program Committee Representative **Fall 2021- Spring 2022**
- Association for Psychological Science Student Caucus Campus Representative **Fall 2021-Spring 2022**
- Furman University Paladin Newspaper Editor **Fall 2020- Spring 2022**

## **TECHNICAL SKILLS**

---

- Coding languages: R (moderate to advanced), JavaScript (moderate to advanced), Python (moderate), Java (basic), MATLAB (moderate), LaTeX (basic)
- Software for wrangling and analyzing data: Rstudio, Matlab, Python, SPSS, jamovi, Excel
- Survey building and recruitment: Qualtrics, MTurk, Prolific, SONA, PsychoPy