Yuchen (Rainy) Jin

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Education

University of Wisconsin-Madison Madison, WI

B.S. in Computer Science and Psychology *Expected May 2025*

- **Cumulative GPA**: 3.96
- **Relevant Courses**: Cognitive Psychology, Research Methods, Child Development, Behavioral Neuroscience, Building User Interfaces, Introduction to Algorithms, Introduction to Big Data Systems, Introduction to Human-Computer Interaction, Computer Graphics

Research Experience

UW-Madison, Learning and Transfer Lab Jan 2022 – Present

Undergraduate Research Assistant *Madison, WI*

- Senior Thesis: Assessing Human Performance in Dynamic Color Mapping Systems
  - Advisors: Dr. C. Shawn Green, Dr. Karen Schloss, Ph.D. Candidate Kushin Mukherjee
  - Designed and developed a calendar-like interface to test when maintaining current color-category mapping system results in the best performance
  - Wrote an IRB protocol for data collection
- Sophomore Thesis: Do Students Set Video Playback Speeds to Maximize Learning?
  - Advisors: Dr. C. Shawn Green, Ph.D. Candidate Ezgi Yüksel
  - Investigated meta-cognition of learning when selecting educational video playback speed
  - Designed and developed research material in Qualtrics
  - Analyzed data using R
- Conducted sessions of research on learning related to gaming abilities using MATLAB
- Trained undergraduate research assistants in conducting experiments and addressed any technical issues for all the above mentioned projects

Carnegie Mellon University, Software and Societal Systems Department May 2024 – Present

REU Research Intern *Pittsburgh, PA*

Advisors: Dr. Joshua Sunshine, Dr. Dominik Moritz, Ph.D Candidate Hwei-Shin Harriman

- Contributed to the design of a visual interactive geometric proof tool, Ender
- Built, improved UI elements such as hoverable tooltips, local event and response logging system using TypeScript
- Conducted semi-structured interviews and usability studies with geometry teachers, synthesizing insights through affinity diagrams
- Conducted usability and performance testing sessions with high school students to evaluate tool
- Assisted in data cleaning and analysis using Python and R
- Maintained accurate records of progress, created timeline and documented each step along the process with Notion

UW-Madison, People and Robots Lab Sep 2023 – Sep 2024

UI/UX Designer and Frontend Developer *Madison, WI*

- Worked on designing a collaborative colored Petri Net graph editor tool Statewise in visualizing Human-Robot Interaction systems
- Conducted tangible methods usability study of the tool
- Collaborated closely with frontend and backend developers to integrate features and ensure smooth functionality

Teaching Experience

Peer Mentor Jan, 2024 – Present

UW-Madison, CS571: Building User Interfaces *Madison, WI*

- Enhanced students' learning environment by conducting 2-hour weekly sessions to resolve any student inquiries.
- Assisted students with understanding concepts in HTML/CSS, JavaScript, React, and React Native.

Fellowships and Honors

- Glushko Outstanding Undergraduate Cognitive Scientist Prize 2024
- Hilldale Undergraduate/Faculty Research Fellowship 2024
- Sophomore Research Fellowship 2023
- Bryan's Aspiring Psychology Student Award 2022

Publications

- Harriman, H., **Jin, Y.**, Ni, W., Moritz, D., & Sunshine, J. (in prep) *Teaching Geometric Proof with Tech: Pitfalls and Possibilities*
- Zhou, Z., **Jin, Y.**, & Praveena, P. (2024). *[Best Paper Nominee]* Statewise: A Petri Net-Based Visual Editor for Specifying Robotic Systems. *Proceedings of the AAAI Symposium Series, 4(1), 380-386.* https://doi.org/10.1609/aaaiss.v4i1.31820

Presentations

- **Jin, Y.**, Yüksel, E., & Green, C.S. (2024, April 25) *Do Students Set Video Playback Speeds to Maximize Learning?* [Poster Presentation]. Undergraduate Symposium, Madison, WI.

Skills

Technical Skill: HTML, CSS, JavaScript, TypeScript, R Studio, Java, React.js, React Native, Node.js, Git

Visual Editors: Figma, Photoshop, Procreate, Blender