Yun-Chen (Jennifer) Hung

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RESEARCH INTERESTS

Cognitive Modeling, Visual Working Memory, Computational Neuroscience, Computer Vision

EDUCATION

Rutgers University–New Brunswick, New Brunswick, NJ — Sep 2025- Present

Ph.D., Cognitive Psychology
- Advisor: Dr. Qiong Zhang
- Excellence Fellowship 2025-26

University of California, San Diego (UCSD), La Jolla, CA — Sep 2021- June 2025

B.S., Cognitive Science with a Specialization in Neuroscience — GPA: 4.0 / 4.0
- Distinction in Cognitive Science
- Senior Honors Thesis: Testing the Flexibility of Pupillary Working Memory Signals to Visual and Semantic Task Demands (Advisor: Dr. Anastasia Kiyonaga)

B.S., Data Science, Machine Learning and Artificial Intelligence Track — GPA: 3.94 / 4.0
- Senior Capstone: Exploring Working Memory Task Predictability using fMRI Data (Advisor: Dr. Armin Schwartzman)

TEACHING EXPERIENCE

Undergraduate Tutor

Conduct exam review sessions, design homework, hold weekly office hours, grade assignments

Theoretical Foundations of Data Science II (UCSD) — Spring 2024
Neuroanatomy and Physiology (UCSD) — Fall 2023

RESEARCH EXPERIENCE

Undergraduate Research Assistant, UCSD

Kiyonaga Lab, Dr. Anastasia Kiyonaga — Feb 2024 – Present
- Investigated the relationship between visual Working Memory and pupil response/ oculomotor movements.
- Collected 100+ eye-tracking data, performed data analysis with Python (NumPy, Pandas) on GitHub.
- Presented independent senior thesis at weekly lab meeting.

Undergraduate Research Assistant, UCSD

Serences Lab, Dr. John Serences — Mar 2023 – Jun 2024
- Devised experiment on unconscious serial dependence with Continuous Flash Suppression using Psychopy.
- Presented and hosted 3+ monthly cognitive neuroscience Journal Club.

Summer Intern, Neuroscience Program of Academia Sinica (NPAS)

Tung Lab, Dr. Yi-Chung Tung — Jul 2022 – Aug 2022
- Studied the migration and differentiation of neuroblastoma under an oxygen gradient.
- Presented research results in a presentation to 30+ summer interns and researchers of Academia Sinica.

TECHNICAL EXPERIENCE

Machine Learning Intern, ActEarn

Wander Social App — Jun 2024 – Sep 2024
- Assisted in development of social app which matches energy-aligned individuals by their answers to given questions
- Developed an internal tool on React for executive team to easily edit and update 10,000+ questions and user answers stored in GCP Big Query and AWS DynamoDB, met engineering team weekly to meet demands
- Optimized database access speed for team members by 70%, worked with 5+ different APIs

Lab Assistant, UCSD

Qualcomm Institute Nano3 Cleanroom   Jan 2022 – Jan 2024
- Proficient in training 30+ Nano3 users on tools (Heidelberg MLA 150, ellipsometers and mask aligners).
- Experience in making samples for prominent companies with dry etching using the Oxford Plasmalab 80, microfabrication with the EVG 620 Mask Aligner, and thin metal deposition with Denton Discovery 635.

SKILLS & CERTIFICATIONS

Programming Languages
Python, R, MATLAB, SQL, Java, HTML, CSS, LaTeX, C++, JavaScript, Svelte

Programming Tools
Spark, AWS, Git/GitHub, VS Code, IntelliJ

Libraries
PyTorch, pandas, NumPy, Scikit-Learn, Dask, React, SciPy, StatsModel

Neuroscience Tools
Psychopy, Eye tracking (Eyelink), ImageJ, Centrifuge, Microscopy

Certifications
Collaborative Institutional Training Initiative (CITI) – Social & Behavioral Research

Languages
Mandarin, English

Others
Adobe Photoshop, Excel

SERVICES & OUTREACH

Halıcıoğlu Data Science Institute Student Council   Aug 2024 – Present
Undergraduate Co-President
- Lead biweekly meetings with 15 student council members to plan socials, career panels, and town halls.
- Addressed concerns that students faced with the curriculum and communicated disconnect between students and department.

Data Science Student Society   Apr 2024 – Present
DataHacks Director
- Facilitating a 200-person hackathon open to all majors and backgrounds.
- Connected with 20+ industry partners and the Halıcıoğlu Data Science Institute faculty for sponsorship.

Global Ambassadors Program (GAP)   Jul 2024 – Sep 2024
Undergraduate Student Mentor
- Connected with international freshman mentees to prepare for university life in the US.

AWARDS & HONORS

- Sponsorship to attend the annual Grace Hopper Celebration (GHC)   2024
- Provost Honors   2021-2024
- Invitation to IEEE's honor society Eta Kappa Nu   2023-2025

PUBLICATIONS

1. Dong Y., **Hung Y**., Kiyonaga A. Working Memory Oculomotor Signals Tracks Working Memory Task Demands. 2024 (Manuscript Work In Progress)

2. Dong, Y., **Hung, Y.**, Xie, C., Kiyonaga, A., Brady, T. (2025). Testing the Flexibility of Pupillary Working Memory Signals to Visual and Semantic Task Demands. Poster presentation at Vision Sciences Society 2025. (Work In Progress)