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, *Excellence Fellowship*
- **Advisor**: Dr. Qiong Zhang

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

B.S., Data Science, *Magna Cum Laude* — cGPA: 3.95 / 4.00
B.S., Cognitive Science with a Specialization in Neuroscience, *Distinction in Cognitive Science*
- Cognitive Science Honors Thesis: Testing the Flexibility of Pupillary Working Memory Signals to Visual and Semantic Task Demands.
  (**Primary Advisor:** Dr. Anastasia Kiyonaga, **Secondary Advisor:** Dr. Tim Brady)
- Data Science Capstone: Exploring Working Memory Task Predictability using fMRI Data.
  (**Advisor:** Dr. Armin Schwartzman, Gabriel Riegner)

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.
- Modified experiment on Psychopy, wrote scripts for probe generation and pupil data cleaning with Python.
- Presented independent senior thesis at 2 weekly lab meetings, and 30+ literature reviews at journal clubs.
- Proficiency in performing calibration of eye-tracking tools through collecting 100+ human subject data.

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 (HDSI) Student Council   Aug 2024 – June 2025
Inaugural President
- Led 20+ weekly meetings with 15 student council members to plan events for students, and established first official HDSI graduation stole.
- Interviewed 2+ Dean candidates for the School of Computing, Information, and Data Science (SCIDS).
- Expressed concerns about the data science program in the undergraduate program review.

Data Science Student Society   Apr 2024 – Apr 2025
DataHacks Co-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
- Preparing international freshman students for university life in the US via preparing 4+ documentations.

AWARDS & HONORS

- Excellence Fellowship, *Rutgers University*   2025-26
- Robert Glushko '79 Cognitive Science Honors Thesis Award, *UCSD*   2025
- Data Science Student Council Award, *UCSD*   2025
- Data Science Community Award, *UCSD*   2025
- Sponsorship to attend the annual Grace Hopper Celebration (GHC), *UCSD*   2024
- Provost Honors, *UCSD*   2021-2025

PUBLICATIONS

1. Dong Y., **Hung Y**., Kiyonaga A. Testing the Flexibility of Pupillary Working Memory Signals to Visual and Semantic Task Demands. 2025 (Manuscript Work In Progress)

POSTER PRESENTATIONS

1. Dong, Y., **Hung, Y.**, Xie, C., Kiyonaga, A. (2025). Pupillary Signatures of Working Memory Content are Flexible to Visual vs. Semantic Task Demands. Poster presentation at Vision Sciences Society 2025.