

EDUCATION

National Taiwan University Taipei, Taiwan
M.S. in Brain and Mind Sciences Sep 2021 – Jan 2024

- Master Thesis: Age differences in decision-making strategies to process featural vs. structural perturbations in environmental choice-outcome mappings
- Advisor: Associate Professor Joshua Oon Soo Goh
- GPA: 4.17/4.3
- 2024 Taiwanese Psychological Association Professor Su Xiangyu Psychology Dissertation Award (Awarded to outstanding master's theses in psychology completed in Taiwan)

National Chengchi University Taipei, Taiwan
B.A. in Economics, Minor in Computer Science Sep 2016 – Jun 2020
B.S. in Psychology

- GPA: 4.2/4.3
- Ranking: 2nd/43
- Academic Achievement Award * 2 (top 5% in class each semester)
- Academic Excellence Award (honor of academic excellence for graduates in the School of Social Science)

EMPLOYMENT

**National Taiwan University,
Graduate Institute of Brain and Mind Sciences** Taipei, Taiwan
Research Assistant (full-time) Feb 2024 – Present

- Principal Investigator: Associate Professor Joshua Oon Soo Goh, Graduate Institute of Brain and Mind Sciences, National Taiwan University
- Perform advanced fMRI connectivity and ROI analysis
- Administer neuropsychological tests for older adults
- Restructure and maintain Python code for ToMNet 2.0 (Theory of Mind neural network project)
- Manage lab Linux servers for brain imaging analysis
- Design and maintain lab website using HTML and CSS, and set up Linux servers for hosting
- Oversee lab expenses and asset management

**Academia Sinica,
Institute of Sociology** Taipei, Taiwan
Research Assistant (part-time) Sep 2023 – Aug 2024

- Principal Investigator: Assistant Research Fellow Hsuan-Wei Lee, Institute of Sociology, Academia Sinica
- Developed a social network model based on evolutionary game theory
- Implemented a social network simulation using reinforcement learning in C
- Organized and visualized simulation results using Python

**National Taiwan University,
Graduate Institute of Brain and Mind Sciences** Taipei, Taiwan
Research Assistant (part-time) Sep 2021 – Jan 2024

- Principal Investigator: Associate Professor Joshua Oon Soo Goh, Graduate Institute of Brain and Mind Sciences, National Taiwan University
- Developed and conducted fMRI experiments using PsychoPy, collecting data from younger and older adult participants
- Administered neuropsychological tests and summarized results
- Designed and implemented reinforcement learning models using Python and MATLAB
- Performed fMRI analysis with SPM12, automating the process using Linux Bash scripts

**National Taiwan University,
Graduate Institute of Brain and Mind Sciences**

Taipei, Taiwan
Sep 2021 – Dec 2021

Teaching Assistant (part-time)

- Principal Investigator: Associate Professor Joshua Oon Soo Goh, Graduate Institute of Brain and Mind Sciences, National Taiwan University
- Assisted with the Cognitive Science course by coordinating with instructors to confirm requirements, collecting assignments and grades, and recording class attendance

**National Chengchi University,
Department of Economics**

Taipei, Taiwan
Jun 2021 – Aug 2021

Research and Administrative Assistant (full-time)

- Principal Investigator: Professor Shu-Heng Chen, Department of Economics, National Chengchi University
- Managed the Ministry of Education (MOE) Talent Cultivation Project for Digital Humanities by organizing meetings and events, maintaining the project website, and coordinating with course instructors

**National Chengchi University,
Department of Psychology**

Taipei, Taiwan
Jan 2021 – Dec 2021

Research Assistant (part-time)

- Principal Investigator: Associate Professor Lee-Xieng, Yang, Department of Psychology, National Chengchi University
- Applied the Hierarchical Dirichlet Process Mixture Model for text analysis using R

**Taipei City Government,
Public Transportation Office**

Taipei, Taiwan
Jul 2020 – Dec 2020

Substitute Military Service (compulsory)

- Carried out administrative duties
- Managed the setup and maintenance of functions and venues

**National Chengchi University,
Department of Psychology**

Taipei, Taiwan
Apr 2020 – Jun 2020

Research Assistant (part-time)

- Principal Investigator: Professor Wen-Yau Hsu, Department of Psychology, National Chengchi University
- Retrieved and organized identification and phone records (raw experimental data) of callers to the Lifeline Association in Taipei using Python
- Supervised the progress of the verbatim transcription work
- Analyzed the transcripts using tf-idf and LDA

**National Chengchi University,
Department of Psychology**

Taipei, Taiwan
Apr 2019 – Jun 2020

Research Assistant (part-time)

- Principal Investigator: Professor Ruey-Ming Liao, Department of Psychology, National Chengchi University
- Conceptualized and formulated mathematical models
- Fitted experimental data of rats to reinforcement learning models using MATLAB
- Analyzed and visualized experimental results using statistical techniques

**National Chengchi University,
Department of Psychology**

Taipei, Taiwan
Mar 2019 – Jun 2020

Research Assistant (part-time)

- Principal Investigator: Associate Professor Lee-Xieng, Yang, Department of Psychology, National Chengchi University
- Assisted in conducting experiments by instructing participants, running the experimental program, debriefing them on the experimental design, and recording their responses

CONFERENCE ABSTRACTS

- **Chen, C. Y.** (Presenter), Wang, L. S., Wang, T. S., Hsing, C. C., Goh, J. O. S. (2024). Age differences in decision-making strategies to process featural vs. structural perturbations in environmental choice-outcome mappings. [Session D, #152]. Poster presentation and Data Blitz session at the Annual Meeting for the Cognitive Neuroscience Society, Toronto, Canada.
- Wang, L. S., Lee, Y. H., Chuang, J. Y., Wang, T. S., Wang, P. K., Chao, W. C., **Chen, C. Y.**, SU, Y. S., Goh, J. O. S. (2023). Greater distance judgment distortion is associated with more subjective than objective representational similarity in extrastriate functional responses in older compared to younger adults. PSTR570.30/VV54. Poster presentation at the Annual Meeting for the Society for Neuroscience, D. C., USA.
- Wang, P. K., Lee, Y. H., Chuang, J. Y., Wang, C. L. S., Chao, W. C., **Chen, C. Y.**, Su, Y. S., Goh, J. O. S. (2023). Different Strategic Neural Correlates Representing Distances Implicates Age-related Distortions in Spatial Navigation. Poster presentation at the Annual Meeting for the Cognitive Neuroscience Society, Boston, USA.
- Lee, Y. H., Chuang J. Y., Wang P. K., Wang T. S., Wang C. L. S., Chao W. C., **Chen C. Y.**, Su Y. S., Goh, J. O. S. (2023). Neural Representations of Age-related Distance Distortion in Human Spatial Navigation. [TSCN20230033]. Oral presentation at the Annual Meeting for the Taiwan Society of Cognitive Neuroscience, National Central University, Taoyuan, Taiwan.

CONFERENCE ATTENDED

- The 63rd Annual Convention of Taiwanese Psychological Association, Taipei, Taiwan. (2024)

CERTIFICATES

- **Deep Learning Specialization**, Coursera (deeplearning.ai)
Courses: Neural Networks and Deep Learning, Improving Deep Neural Networks, Structuring Machine Learning Projects, Convolutional Neural Networks, Sequence Models (2019)
- **Certificate of Participation**, Taiwan Brain Bank Workshop
Taiwan Brain Bank Association & Graduate Institute of Anatomy and Cell Biology, College of Medicine, National Taiwan University (2024)

SKILLS

- **Computational Skills:** C, C++, Python, R, MATLAB, SPM12, PsychoPy, Psychtoolbox, Linux, LaTeX
- **Languages:** Mandarin & Taiwanese Hokkien (native), English (fluent, TOEFL 103), Japanese (advanced, N1), French (basic)

RESEARCH INTERESTS

- Investigating how model-based decision-making is represented and processed in the brain
- Exploring the role of cognitive control in shaping decision-making processes
- Quantifying neurocomputational processes in decision-making using reinforcement learning and other machine learning approaches