Jun YANG

EMAIL: keithyang31415@gmail.com Last updated on July 5, 2024

EDUCATION

SEP. 2020–JUN. 2024 | **Tsinghua University**, Weiyang College — Beijing, China
B.Sc. & B.Eng.
Major: Mathematics and Physics + Electrical Engineering and Automation
GPA: 3.91/4.0

JAN. 2023 | **Shanghai Jiao Tong University**, The 12th Computational Neuroscience Winter School
A one-week online winter school on computational neuroscience

JUL. 2024 | **CNeuro 2024**, Theoretical and Computational Neuroscience Summer School
A one-week online winter school on computational neuroscience organized by Tsinghua Laboratory of Brain & Intelligence (THBI) and Institute of Molecular & Clinical Ophthalmology Basel (IOB).

RESEARCH INTERESTS

Theoretical Neuroscience, Nonlinear Dynamics

RESEARCH EXPERIENCE

JUL. 2023–PRESENT | **UCLA**, Summer Internship
Advisor: *Mayank R. Mehta, Department of Physics*
Analyzed Visual Coding - Neuropixels dataset in Allen Brain Observatory and found locomotion enhances movie selectivity of visual and hippocampal areas.

JUL. 2022–PRESENT | **New York University Shanghai**, Research Assistant
Advisor: *Sukbin Lim, Department of Neural Science*
Built an attractor network model that bridges the oblique effect and cardinal biases in visual working memory. Explained the variance profile which seemingly contradicts attractor dynamics.

FEB. 2022–JUN. 2022 | **Tsinghua University**, "Spark" Innovative Talent Cultivation Program
Advisor: *Pei Sun, Department of Psychology*
Investigated the information routing patterns in a Kuramoto oscillator network.

PREPRINTS

- **J. Yang**, H. Zhang, and S. Lim. (2024). Sensory-memory interactions via modular structure explain errors in visual working memory [Reviewed preprint version 1]. eLife. https://doi.org/10.7554/eLife.95160.1

POSTER PRESENTATIONS

- **J. Yang**, H. Zhang, and S. Lim. Cardinal repulsion in working memory requires sensory-memory network interactions. Program No. 169.03. Washington, D.C.: Society for Neuroscience (SfN), Nov. 11-15, 2023.

SCHOLARSHIPS AND AWARDS

2020–2022 Scholarship of Academic Excellence, Tsinghua University
2021–2023 Scholarship of Scientific or Technological Innovation Excellence, Tsinghua University

TECHNICAL SKILLS

MATLAB, C, Python (NumPy, CuPy, SciPy, scikit-learn, PyTorch, CVXPY), Git, Verilog, Simulink, Wolfram Mathematica, LaTeX, Typst, MatCont, AUTO