

Jun (Keith) Yang

Last updated on Mar. 02, 2025

EMAIL junkyang@gatech.edu
 [kyang-n.github.io](https://github.com/kyang-n)
 0000-0002-2484-2494

Education

- 2024 – 2029 **Ph.D.** (Quantitative Biosciences), **Georgia Institute of Technology**
(expected) To be advised by Dr. Hannah Choi or Dr. Audrey Sederberg.
- 2020 – 2024 **B.Sc. & B.Eng.**, **Tsinghua University**
Major: Mathematics and Physics + Electrical Engineering and Automation

Research Interests

- Dynamical systems — neural dynamics
- Statistical field theory for neural networks
- Information theory

Generally speaking, my research aims at revealing the fundamental link between structure, dynamics, and function of neuronal networks.

Publications

Preprints

- [1] **Yang, J.** (in preparation). Theories on random recurrent neural networks: a brief review.

Journal articles

- [1] **Yang, J.**, Zhang, H. & Lim, S. (2024). Sensory-memory interactions via modular structure explain errors in visual working memory. *eLife* **13**, RP95160. <https://doi.org/10.7554/eLife.95160.4>

Summer Schools and Workshops

- 2024 **CNeuro 2024**, Tsinghua University
A one-week computational neuroscience summer school.
- 2023 **The 12th Computational Neuroscience Winter School**, Online
A winter school organized by Shanghai Jiao Tong University

Scholarships & Awards

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

Teaching

Teaching assistantship (at Georgia Tech)

| Term | Course | Duty |
|-------------|-------------------------------------|--|
| Spring 2025 | MATH 1553 Intro to Linear Algebra | Taught studio sessions (i.e., recitations) |
| Fall 2024 | MATH 1554 Linear Algebra | Grader |

Technical skills

| | Skill | Level | Detail |
|-----------------------------|-------------------------------|--|---|
| Programming/ Typesetting | C | <div><div></div><div></div><div></div><div></div></div> | First programming language learned. |
| | Python | <div><div></div><div></div><div></div><div></div></div> | For scientific computing (SciPy, NumPy, scikit-learn, CVXPY, PyTorch, Matplotlib etc.). |
| | MATLAB | <div><div></div><div></div><div></div><div></div></div> | Main tool for simulation and data analyses. MatCont, MatPower. |
| | Wolfram Mathematica | <div><div></div><div></div><div></div><div></div></div> | Beginner. |
| | Julia | <div><div></div><div></div><div></div><div></div></div> | Beginner. |
| | LaTeX & Typst | <div><div></div><div></div><div></div><div></div></div> | Typesetting academic papers. |
| Software | Microsoft Office Suite | <div><div></div><div></div><div></div><div></div></div> | Power Point, Word, Excel, OneNote, etc. |
| | Adobe Photoshop & Illustrator | <div><div></div><div></div><div></div><div></div></div> | Making figures for academic papers. |
| | Git | <div><div></div><div></div><div></div><div></div></div> | Code version management. |
| Languages | English | <div><div></div><div></div><div></div><div></div></div> | Fluent in academic speech and writing. |
| | Chinese | <div><div></div><div></div><div></div><div></div></div> | Native language. |
| | | <div><div></div><div></div><div></div><div></div></div> basic knowledge | <div><div></div><div></div><div></div><div></div></div> extensive knowledge |
| | | <div><div></div><div></div><div></div><div></div></div> intermediate knowledge | <div><div></div><div></div><div></div><div></div></div> expert knowledge |