Jun (Keith) Yang

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Education

2024 – 2029 Ph.D. (Quantitative Biosciences), Georgia Institute of Technology

(expected) Advisor: Dr. Hannah Choi

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. (2025). Theories on random recurrent neural networks: a brief review. *OSF Preprints*, https://doi.org/10.31219/osf.io/ztfn7_v1

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

2025 Modeling Software Workshop, Allen Institute

A workshop on BMTK and VND.

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	С		First programming language learned.
	Python		For scientific computing (BMTK, AllenSDK, PyNest, NumPy, scikit-learn, CVXPY, PyTorch, Matplotlib, IDTxl, etc.).
	MATLAB		Main tool for simulation and data analyses. MatCont, MatPower, MINT.
	Wolfram Mathematica		Beginner.
	Julia		Beginner.
	LaTeX & Typst		Typesetting academic papers.
Software	Microsoft Office Suite		PowerPoint, Word, Excel, OneNote, etc.
	Adobe Photoshop & Illustrator		Making figures for academic papers.
	Git		Code version management.
Languages -	English		Fluent in academic speech and writing.
	Chinese		Native language.
	basic kı	nowledge	extensive knowledge
	interme	diate knowledge	expert knowledge