Stanford

Daniel Yamins

Associate Professor of Psychology and of Computer Science

Bio

ACADEMIC APPOINTMENTS

- Associate Professor, Psychology
- Associate Professor, Computer Science
- Member, Bio-X
- Faculty Affiliate, Institute for Human-Centered Artificial Intelligence (HAI)
- Member, Wu Tsai Neurosciences Institute

PROGRAM AFFILIATIONS

- Symbolic Systems Program

PROFESSIONAL EDUCATION

- Ph.D., Harvard University , Applied Mathematics (2008)

LINKS

- NeuroAILab: http://neuroailab.stanford.edu/

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

Our lab's research lies at intersection of neuroscience, artificial intelligence, psychology and large-scale data analysis. It is founded on two mutually reinforcing hypotheses:

H1. By studying how the brain solves computational challenges, we can learn to build better artificial intelligence algorithms.

H2. Through improving artificial intelligence algorithms, we'll discover better models of how the brain works.

We investigate these hypotheses using techniques from computational modeling and artificial intelligence, high-throughput neurophysiology, functional brain imaging, behavioral psychophysics, and large-scale data analysis.

Teaching

COURSES

2026-27

- Large-Scale Neural Network Modeling for Neuroscience: CS 375 (Win)

2025-26

- Large-Scale Neural Network Modeling for Neuroscience: CS 375, PSYCH 249 (Win)

2024-25

- Advanced Statistical Modeling for Behavioral and Neural Sciences: PSYCH 254A (Spr)
- Advancing Cognitive Science and AI with Cognitive-AI Benchmarking: PSYCH 267B (Win)
- Large-Scale Neural Network Modeling for Neuroscience: CS 375, PSYCH 249 (Win)

2023-24

- Bids for Scale in Psychological Science: PSYCH 267A (Win)
- Large-Scale Neural Network Modeling for Neuroscience: CS 375, PSYCH 249 (Win)

STANFORD ADVISEES

Doctoral Dissertation Advisor (AC)

Alex Durango, Wanhee Lee, Rahul Venkatesh

Master's Program Advisor

Yasmina Abukhadra, Ayush Alag, Aanika Atluri, Daphne Barretto, Chris Rilling, Andrew Shi, Calvin Xu

Doctoral Dissertation Co-Advisor (AC)

Kwon Ko, Seojin Lee, Takateru Yamakoshi

Doctoral (Program)

Khai Loong Aw, Khaled Jedoui, Klemen Kotar, Yash Shah, Rahul Venkatesh