

Stanford



Daniel Yamins

Assistant Professor of Psychology and of Computer Science

Bio

ACADEMIC APPOINTMENTS

- Assistant Professor, Psychology
- Assistant 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

2022-23

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

2021-22

- Triangulating Intelligence: Melding Neuroscience, Psychology, and AI: CS 322, PSYCH 225 (Win)

2020-21

- Advanced Statistical Modeling: PSYCH 253 (Spr)
- High-level Vision: From Neurons to Deep Neural Networks: PSYCH 250 (Win)

2019-20

- Advanced Statistical Modeling: PSYCH 253 (Spr)
- Large-Scale Neural Network Modeling for Neuroscience: CS 375, PSYCH 249 (Aut)
- NeuroTech Training Seminar: NSUR 239, STATS 242 (Win)
- Theoretical Neuroscience: APPPHYS 293, PSYCH 242 (Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Josh Melander, Andrew Nam, tyler bonnen

Orals Chair

Nicole Hartman

Postdoctoral Faculty Sponsor

Logan Cross

Doctoral Dissertation Advisor (AC)

Alex Durango, Kevin Feigelis, Wanhee Lee, Javier Sagastuy Brena

Master's Program Advisor

Chris Rilling, Anfal Siddiqui, David Zhou

Doctoral (Program)

Honglin Chen, Rahul Venkatesh