

# Stanford

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## Daniel Yamins

Assistant Professor of Psychology and of Computer Science

### Bio

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#### 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

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#### 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

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### COURSES

#### 2023-24

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

#### 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: CS 431, PSYCH 250 (Win)

### STANFORD ADVISEES

#### Doctoral Dissertation Reader (AC)

Josh Melander, Andrew Nam

#### Postdoctoral Faculty Sponsor

Logan Cross, Stefan Stojanov

#### Doctoral Dissertation Advisor (AC)

Alex Durango, Kevin Feigelis, Wanhee Lee

#### Master's Program Advisor

Yasmina Abukhadra, Ananth Agarwal, Wensi Ai, Ayush Alag, Daphne Barretto, Arianna Damiani, Jitong Zhou

#### Doctoral Dissertation Co-Advisor (AC)

Daniel Paul Kunin

#### Doctoral (Program)

Honglin Chen, Khaled Jedoui, Klemen Kotar, Rahul Venkatesh