

Stanford



Daniel Yamins

Assistant Professor of Psychology and, by courtesy, of Computer Science

Bio

ACADEMIC APPOINTMENTS

- Assistant Professor, Psychology
- Assistant Professor (By courtesy), Computer Science
- Member, Bio-X
- Member, Wu Tsai Neurosciences Institute

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

2018-19

- High-Dimensional Methods for Behavioral and Neural Data: PSYCH 253 (Spr)
- High-level Vision: From Neurons to Deep Neural Networks: CS 431, PSYCH 250 (Spr)

- Large-Scale Neural Network Modeling for Neuroscience: CS 375, PSYCH 249 (Aut)
- Theoretical Neuroscience: APPPHYS 293, PSYCH 242 (Spr)

2017-18

- High-Dimensional Methods for Behavioral and Neural Data: PSYCH 253 (Spr)
- Large-Scale Neural Network Modeling for Neuroscience: CS 375, PSYCH 249 (Aut)
- Theoretical Neuroscience: APPPHYS 293, PSYCH 242 (Spr)

2016-17

- High-level Vision: From Neurons to Deep Neural Networks: PSYCH 250 (Spr)
- High-level Vision: From Neurons to Deep Neural Networks: PSYCH 250A (Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Biafra Ahanonu, Mona Rosenke

Postdoctoral Faculty Sponsor

Daniel Bear

Master's Program Advisor

Jiawen Xu, David Zhou

Postdoctoral Research Mentor

Daniel Bear, Nicholas Haber