LUCY LAI

lucylai@g.harvard.edu
http://www.lucy-lai.com/

EDUCATION

HARVARD UNIVERSITY, CAMBRIDGE, MA — 2018 -
Ph.D. in Neuroscience

RICE UNIVERSITY, HOUSTON, TX — 2014 - 2018
B.A. in Cognitive Sciences with Honors
Minors in Neuroscience, Computational and Applied Mathematics
Distinction in Research and Creative Work

AWARDS &HONORS

National Science Foundation Graduate Research Fellowship	2018 - 2023
Phi Beta Kappa National Honor Society	2018
Cognitive Computational Neuroscience student travel award	2017
Janelia Undergraduate Scholars Program Fellowship	2017
Barry M. Goldwater Scholarship honorable mention	2017
Center for Sensorimotor Neural Engineering (CSNE) NSF-REU Fellowship	2016
Computational and Systems Neuroscience (Cosyne) undergraduate travel award	2016
Rice Undergraduate Scholars Program thesis grant	2016 - 2018

RESEARCH

BAYLOR COLLEGE OF MEDICINE, HOUSTON, TX — JAN 2015 – JUN 2018
Advisor: Jeffrey Yau

- Designed behavioral experiments and built computational models to understand flexibility in multisensory perception.

JANELIA RESEARCH CAMPUS, ASHBURN, VA — JUN 2017 – AUG 2017
Advisor: Joshua Dudman

- Used *in-vivo* neural recordings to understand how the motor cortex and striatum represent the kinematics of motor behaviors during reward-seeking actions.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MA — JUN 2016 – AUG 2016
Advisor: Mehrdad Jazayeri

- Designed behavioral experiments and built Bayesian inference models to understand the role of memory in sensorimotor updating.

PRESENTATIONS &PAPERS

Lai, L., Magnotti, JF., Yau, JM. *Multisensory context warps time perception*. Cognitive Computational Neuroscience meeting, New York, NY, conference paper: September 7, 2017.

Lai, L., Dudman, JT. *Neural correlates of action kinematics in the dorsal striatum.* Janelia Undergraduate Scholars symposium, Ashburn, VA, poster: August 3, 2017.

Lai, L., Magnotti, JF., Yau, JM. *Contextual determinants of cue binding or separation in multisensory time perception.* International Multisensory Research Forum annual meeting, Nashville, TN, poster: May 21, 2017.

Lai, L., Yau, JM. *Attractive and repulsive multisensory interactions in time perception.* Society for Neuroscience annual meeting, San Diego, CA, poster: November 14, 2016.

Lai, L., Jazayeri, M. *Characterizing variability in memory recall of time intervals.* Center for Sensorimotor Neural Engineering REU Symposium, Seattle, WA, poster: August 17, 2016.

TEACHING

TEACHING FELLOW, HARVARD MEDICAL SCHOOL — S 2019
- Designing a graduate course on probabilistic modeling of neural data (w/ Jan Drugowitsch)

TEACHING ASSISTANT, BAYESIAN TUTORIAL COURSE — COSYNE 2019
- Led computational exercises at crash course on Bayesian modeling (w/ WeiJi Ma)

HPREP CURRICULUM TEAM, HARVARD MEDICAL SCHOOL — F 2018
- Teaching and curriculum development with HPREP, a science enrichment program for underserved Boston-area high school students.

COLL 158: HOW MUSIC PLAYS THE BRAIN, RICE UNIVERSITY — S 2017, F 2017, S 2018
- Designed and taught a seminar course on the intersection of music and neuroscience. Topics include the neurobiology of music perception and cognition, music therapy, AI and music, etc. Won the 2017 Rice Student-Taught Course Award!

TEACHING ASSISTANT, RICE UNIVERSITY

1. NEUR/PSYC 362: Cognitive Neuroscience — S 2016, S 2017, S 2018
2. NEUR/CAAM 416: Neural Computation — S 2018
3. NEUR/BIOC 385: Cellular and Molecular Neuroscience — F 2016
4. STAT 310: Probability and Statistics — F 2016
5. PSYC 203: Cognitive Psychology — F 2015

BRAINSTEM, KIPP SUNNYSIDE HIGH SCHOOL — 2015 – 2017
- Mentored and taught high school students through a neuroscience curriculum.

SPLASH, RICE UNIVERSITY — S 2017
- Taught middle schoolers from Houston-area schools about neuroscience and music.

LEADERSHIP &PROFESSIONAL

Head Academic Fellow, Lovett College, Rice University — 2016 - 2018
Catalyst Executive Editor, Rice Undergraduate Science Research Journal — 2014 - 2016
Conference Organizer, Exploring the Mind through Music Conference, Rice University — 2016
Alumni Week Coordinator, Lovett College, Rice University — 2016
Urban Immersion Coordinator, Center for Civic Leadership, Rice University — 2014 - 2015
Tour Guide, Welcome Center, Rice University — 2014 - 2015

SKILLS &OTHER

Programming: MATLAB, Python, Javascript, HTML/CSS
Lab: psychophysics, Amazon MTurk, *In-vivo* acute electrophysiology, rodent behavior
Interests: classical music, poetry, long-distance running, coffee