KIRSTEN ZIMAN

kz0108@Princeton.edu ◇ KirstenZiman.com ◇ 310 · 920 · 5973 ◇ Princeton, NJ

ACADEMIC APPOINTMENTS

Princeton University *2022 - Present*
Postdoctoral Research Fellow, Princeton Neuroscience Institute
Advisor: Michael Graziano

EDUCATION

Dartmouth College *2022*
Ph.D., Cognitive Neuroscience
Advisors: Jeremy Manning, Peter Tse

University of Southern California *2014*
B.S., Neuroscience
Brain and Creativity Institute
Advisors: Antonio Damasio, Assal Habibi

FUNDING

NIH Institutional Training Grant (t32) *2022*
Postdoctoral Research Fellow

NSF Established Program to Stimulate Competitive Research (EPSCoR) *2017*
Graduate Student

HONORS & AWARDS

Graduate Travel Award, Dartmouth Graduate Studies *2021*
Neukom Prize for Outstanding Graduate Research in Computational Science *2020*
Tau Sigma Honors Society, University of Southern California *2013*
Phi Theta Kappa Honors Society, Beta Kappa Delta Chapter *2012*
National Merit Scholar Semifinalist *2007*

PUBLICATIONS

** Indicates equal first authorship, Undergraduate trainees are underlined*

Ziman K., Kimmel S. C., Farrell K. T., Graziano M. S. A. Predicting the Attention of Others (2023). *Proceedings of the National Academy of Sciences.*

Ziman K., Manning J. R. Unexpected false feelings of familiarity about faces are associated with increased pupil dilations (Under revision). *Psychonomic Bulletin & Review.*

Ziman, K., Lee, M. R., Martinez, A. R., Adner, E. D., Manning, J. R. (In preparation). Covert attention enhances memory for attended items and for related unattended items.

Saleki, S., **Ziman, K.**, Hartstein, K. C., Cavanagh, P., Peter, U. T. (2022). Endogenous attention biases transformational apparent motion based on high-level shape representations. *Journal of Vision, 22(12), 16-16.*

Hartstein K. C., Saleki S., **Ziman K.**, Cavanagh P., Tse P. U. (2021). First- and second-order transformational apparent motion rely on common shape representations. *Vision Research.*

Heusser A. C.*, **Ziman K.*** , Owen L. L. W., & Manning J. R. (2018). HyperTools: A Python toolbox for gaining geometric insights into high-dimensional data. *Journal of Machine Learning Research.*

Ziman K., Heusser A. C., Fitzpatrick P. C., Field C. E., & Manning J. R. (2018). Is automatic speech-to-text transcription ready for use in psychological experiments? *Behavior Research Methods.*

Heusser A. C., Fitzpatrick C. P., Field C. E., **Ziman K.**, & Manning J. R. (2017). Quail: A Python toolbox for analyzing and plotting free recall data. *The Journal of Open Source Software, 2, 424.*

TALKS

Predictive Modelling of Attention, *Princeton Neuroscience Institute Seminar Series*, Upcoming: 3/7, Princeton, NJ.

Attentional Modelling in the Brain. *Society for Neuroscience*, Upcoming: 11/11/2023, Washington DC.

Modelling and Predicting the Attention of Others, *Association for the Scientific Study of Consciousness*, 6/22/2023, New York, NY.

Pupil dilation increases when participants report familiarity for images of faces they have not seen before, *Association for the Scientific Study of Consciousness*, 6/16/2021, Virtual.

First & Second-order Transformational Apparent Motion Rely on Common Shape Representations, *Barnard Vision Lab*, 11/15/2021, Virtual.

Cognitive Markers of Psychiatric Traits, *Dartmouth College Cognitive Brown Bag Series*, 2020, Hanover, NH.

Cognitive Markers of Psychiatric Traits, *Dartmouth College Cognitive Brown Bag Series*, 2020, Hanover, NH.

Attention and Memory, *Dartmouth College Specialist Presentation*, 2019, Hanover, NH.

Volitional Attention Modulates Encoding and Retrieval, *Dartmouth College Cognitive Brown Bag Series*, 2018, Hanover, NH.

Speaker at EPSCoR Attention Consortium Talk Series, *Montana State University*, 2017, Bozeman, Montana.

POSTERS & ABSTRACTS

Kimmel S. C., Farrell K. T., **Ziman K.**, Graziano M. S. A. (2023). Modelling and Predicting the Attention of Others. *Association for the Scientific Study of Consciousness.* New York, NY.

Ziman K., Kimmel S. C., Farrell K. T., Graziano M. S. A. (2023). Predicting the Attention of Others. *Princeton Neuroscience Retreat.* Philadelpha, PA.

Ziman K., Manning J. R. (2021). Increased pupil dilations are associated with unexpected false familiarity for faces. *Society for Neuroscience.* Chicago, IL.

Ziman K., Manning J. R. (2021). Pupil dilation increases when participants report familiarity for images of faces they have not seen before. *Association for the Scientific Study of Consciousness.* Virtual from Tel-Aviv, Israel.

Ziman K., Lee M. R., Martinez A. R., Manning J. R. (2019). Volitional attention modulates memory encoding and retrieval. *Society for Neuroscience Conference.* Chicago, IL.

Ziman K., Heusser A. C., Fitzpatrick P. C., Field C. E., & Manning J. R. (2018). Is automatic speech-to-text transcription ready for use in psychological experiments? *Context and Episodic Memory Symposium.* Philadelphia, PA.

Fitzpatrick PC, **Ziman K**, Heusser AC, Field CE, Manning JR (2018) The utility of speech-to-text software for transcription of verbal response data. Wetterhan Science Symposium. Hanover, NH.

Pak EK, **Ziman K**, Manning JR (2018) How does attention affect memory? Wetterhan Science Symposium. Hanover, NH.

Lee MR, Chacko RS, Whitaker EC, Fitzpatrick PC, Field CE, **Ziman K**, Bollinger BJ, Heusser AC, Manning JR (2018) Adaptive Free Recall: Enhancing (Or Diminishing) Memory. Wetterhan Science Symposium. Hanover, NH.

Ziman K., Heusser A.C., Manning J.R. (2017). Effects of Study Context on Recall Organization. *Society for Neuroscience Conference.* Washington, DC.

Ziman K., Heusser A.C., Manning J.R. (2017). Harnessing the power of mnemonic fingerprints: Maximizing learning potential by personalizing stimulus organization during adaptive list learning. *Context and Episodic Memory Symposium.* Philadelphia, PA.

Heusser A.C., **Ziman, K.**, Manning J.R. (2017). HyperTools: A Python toolbox for visualizing and manipulating high-dimensional data. *Context and Episodic Memory Symposium.* Philadelphia, PA.

Manning JR, **Ziman, K**, Heusser AC (2017) Efficient Learning: Manipulating context to enhance (or diminish) memory. *Society for Neuroscience. Washington, DC.* Washington, DC.

Ziman, K., Familiar, A.M., Shim, W.M. (2016). Positive affect worsens ensemble coding performance. *Vision Science Society Conference.* Saint Pete Beach, Florida.

Deirdre B., Lennon J., **Ziman K.** (2016). Content of Sleep-talking Transcripts versus Dream Accounts and Waking Language. *International Association for the Study of Dreams Conference.* Virginia Beach, Florida.

Wong, W.O., Suthana, N.A., Pourshaban, D., **Ziman, K.**, Bookheimer, S., Fried, I., Knowlton, B. (2012). Comparison of Medial Temporal Subregional Thickness and Overall Brain Volume to Episodic Memory Performance in Humans. *UCLA Undergraduate Poster Session.* Los Angeles, California.

SOFTWARE DEVELOPMENT

HyperTools toolbox for analyzing & visualizing high-dimensional data (Python, open-source)
**featured in Kaggle "No Free Hunch" blog and over 1,500 stars on GitHub*

AutoFR toolbox to automatically transcribe verbal free recall data (Python, open-source)

Quail toolbox for analyzing and plotting free recall data (Python, open-source)

AD HOC REVIEWER

Journal of Open Source Software
Frontiers (Open Access Research Journal)

TEACHING

Laboratory in Principles of Neuroscience, Princeton University *Spring 2023*
Teaching Assistant to Lecturer Anthony Ambrosini

Functional Neuroanatomy, Princeton University *Fall 2022*
Teaching Assistant to Professor Michael Graziano

Laboratory in Psychological Science, Dartmouth College *Winter 2020*
Teaching Assistant to Professor Keilah Worth

Experiment Design, Methodology & Data Analysis, Dartmouth College *Spring 2019*
Teaching Assistant to Professor Catherine Cramer

Principles of Human Brain Mapping with MRI, Dartmouth College *Fall 2019*
Teaching Assistant to Professor Jeremy Huckins

Principles of Human Brain Mapping with MRI, Dartmouth College *Fall 2018*
Teaching Assistant to Professor Jeremy Huckins

MENTORSHIP

GRADUATE MENTEES:

Yeo Bi Choi, *fourth year graduate student in the Robertson Laboratory at Dartmouth College*
Byeol Kim, *third year graduate student in the Wager Laboratory at Dartmouth College*

UNDERGRADUATE MENTEES:

Paxton Fitzpatrick, *recipient of multiple awards & current graduate student, Dartmouth College*
Ethan Adner, *recipient of Neukom undergraduate research fellowship at Dartmouth College*
Natalie Schroeder, *recipient of David C. Hodgson Endowment at Dartmouth College*
Darren Gu, *recipient of David C. Hodgson Endowment at Dartmouth College*
Madeline Lee, *Sophomore Research Scholar at Dartmouth College*
Sarah Kimmel, Kathryn Farrell, Eowyn Pak, Campbell Field, Marisol Tracy, Alejandro Martinez, Sarah Park, William Chen, Chetan Pavuluri, Chelsea Uddenberg, Swestha Jain, Christina Lu, Alex Chivers

PROFESSIONAL ACTIVITIES

Association for the Scientific Study of Consciousness Student Committee President, 2023
Princeton Neuroscience Institute Social Committee, 2023
Association for Women in Science member, 2022
Association for the Scientific Study of Consciousness Student Committee Member, 2022
National Center for Faculty Development & Diversity Member, 2022
National Postdoctoral Association Member, 2022
Interviewer for Dartmouth College graduate recruitment, 2021
Dartmouth College representative at Society for Neuroscience, 2021

Leader of Graduate Student Roundtable weekly meetings (one academic year), 2018
Methods in Neuroscience at Dartmouth Workshop Attendee, 2017
Leader of Attention Consortium (EPSCoR) Graduate Student Journal Club, 2017

EDUCATIONAL OUTREACH

Re-Match research-mentoring program at Princeton University, 2023
Scientific Reviewer for Mass STEM Hub, 2023 (reviewed 8 high school research proposals)
Mill Hill student laboratory tour and science activity, 2023
Mill Hill student Career Panel, 2023
Letters to a Pre-Scientist STEM professional letter writer, 2020
Guest Speaker at Brain Speaker Series, Richmond Middle School 2017, 2019-2020
Presenter at Dartmouth College Brain Bee, 2018

EMPLOYMENT HISTORY

Contextual Dynamics Laboratory, Dartmouth College *2016-2017*
Laboratory Manager

Perception and Cognition Laboratory, Dartmouth College *2015-2016*
Laboratory Manager

Brain and Creativity Institute, University of Southern California *2013-2014*
Research Assistant

Cognitive Neurophysiology Lab, University of California, Los Angeles *2011-2012*
Research Assistant

CLINICAL EXPERIENCE

Children's Hospital Los Angeles, Medical Preceptoriship Program *2013*
UCLA Orthopedic Hospital, Child Life Volunteer *2011*