

# KIRSTEN ZIMAN

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## EMPLOYMENT

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**Princeton University** 2022  
Postdoctoral Research Fellow, Princeton Neuroscience Institute

## EDUCATION

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**Dartmouth College** 2022  
Ph.D., Cognitive Neuroscience

**University of Southern California** 2014  
B.S., Neuroscience

## FUNDING

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

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

## HONORS & AWARDS

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**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

## PEER-REVIEWED PUBLICATIONS

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

Saleki S., **Ziman K.**, Hartstein K. C., Cavanagh P., Tse P. U. (2021). Endogenous attention modulates transformational apparent motion based on high-level shape representations. *In press, Journal of Vision.*

**Ziman K.**, Manning J. R. (2021). Unexpected false feelings of familiarity about faces are associated with increased pupil dilations. *Under revision, Psychonomic Bulletin & Review.*

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.*

## PREPRINT PUBLICATIONS

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**Ziman K.**, Lee M. R., Martinez A. R., Adner, E. D. & Manning J. R. (2020). Feature-based and location-based volitional covert attention are mediated by different mechanisms and affect memory at different timescales. *PsyArXiv: 10.31234/osf.io/2ps6e.*

## POSTERS & ABSTRACTS

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**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.

**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

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

**AutoFR** toolbox for automatically transcribing verbal free recall data (Python, open-source)

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

## AD HOC REVIEWER

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

## TEACHING

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

Fall 2022

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

Winter 2020

**Experiment Design, Methodology & Data Analysis Procedures**, 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

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### GRADUATE MENTEES:

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

### UNDERGRADUATE MENTEES:

**Paxton Fitzpatrick**, *recipient of multiple awards & current graduate student at 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*  
**Eowyn Pak, Campbell Field, Marisol Tracy, Alejandro Martinez, Sarah Park, William Chen, Chetan Pavuluri, Chelsea Uddenberg, Swestha Jain, Christina Lu, Alex Chivers**

## PROFESSIONAL ACTIVITIES

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Association for the Scientific Study of Consciousness Student Committee Member, 2022  
National Center for Faculty Development & Diversity Member, 2022  
National Postdoctoral Association Member, 2022  
Letters to a Pre-Scientist STEM professional letter writer, 20XX, 2022  
Interviewer for Dartmouth College graduate recruitment, 2021  
Guest Speaker at Brain Speaker Series, Richmond Middle School 20XX-20XX  
Dartmouth College representative at Society for Neuroscience, 2021  
Methods in Neuroscience at Dartmouth Workshop Attendee, 2017  
Presenter at Dartmouth College Brain Bee, 2018  
Leader of Graduate Student Roundtable weekly meetings (one academic year), 2018  
Leader of Attention Consortium (EPSCoR) Graduate Student Journal Club, 2017

## EMPLOYMENT HISTORY

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**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 Laboratory, University of California, Los Angeles** *2011-2012*  
Research Assistant

## CLINICAL EXPERIENCE

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