

JOSHUA C. PETERSON

www.joshcpeterson.com | joshcp@bu.edu

EMPLOYMENT & EDUCATION

Boston University, Faculty of Computing & Data Sciences
Assistant Professor, 2023 – current

Princeton University, Department of Computer Science
Postdoctoral Research Associate, 2018 – 2023

University of California, Berkeley
Ph.D., Psychology, 2018

Thesis: *Leveraging deep neural networks to study human cognition*
Advisor: *Thomas L. Griffiths*

University of California, Davis
B.A., Cognitive Science, 2012

Service: *Creator of the major in cognitive science and first graduate*
Honors: *Magna Cum Laude*
Thesis: *Groove, enjoyment, and listening time in polyphonic music sequences*
Advisor: *Petr Janata*
Research: *Memory and Development (Ghetti) Lab, 2010-2011; Janata Lab, 2011-2012*

Folsom Lake College
A.A., General Education, 2010
A.S., Interdisciplinary Studies, 2010
Honors: *Valedictorian*

KEY PUBLICATIONS AT A GLANCE

Peterson, J. C., Bourgin, D., Agrawal, M., Reichman, D., & Griffiths, T. (2021). Using large-scale experiments and machine learning to discover theories of human decision-making. *Science*.

Zhu, J. Q., **Peterson, J. C.**, Enke, B., & Griffiths, T. L. (2025). Capturing the complexity of human strategic decision-making with machine learning. *Nature Human Behaviour*.

Agrawal, M., **Peterson, J. C.**, Griffiths, T. (2020). Scaling up Psychology via Scientific Regret Minimization. *Proceedings of the National Academy of Sciences*.

Peterson, J. C., Uddenberg, S., Griffiths, T., Todorov, A., & Suchow, J. (2022). Deep models of superficial face judgments. *Proceedings of the National Academy of Sciences*.

Peterson, J. C.*, Battleday, R.*, Griffiths, T., & Russakovsky, O. (2019). Human uncertainty makes classification more robust. *Proceedings of the International Conference on Computer Vision*.

Battleday, R.*, **Peterson, J. C.*** (equal contribution), & Griffiths, T. (2020). Capturing human categorization of natural images at scale by combining deep networks and cognitive models. *Nature Communications*.

JOURNAL ARTICLES

J15. Zhu, J. Q., **Peterson, J. C.**, Enke, B., & Griffiths, T. L. (2025). Capturing the complexity of human strategic decision-making with machine learning. *Nature Human Behaviour*, 9(10), 2114-2120.

J14. Plonsky, O., Apel, R., Ert, E., Tennenholtz, M., Bourgin, D., **Peterson, J. C.**, ... & Erev, I. (2025). Predicting human decisions with behavioural theories and machine learning. *Nature Human Behaviour*, 9(11), 2271-2284.

J13. Binz, M., Akata, E., Bethge, M., Brändle, F., Callaway, F., Coda-Forno, J., Dayan, P., Demircan, C., Eckstein, M. K., Éltető, N., Griffiths, T. L., Haridi, S., Jagadish, A. K., Li, J.-A., Kipnis, A., Kumar, S., Ludwig, T., Mathony, M., Mattar, M., Modirshanechi, A., Nath, S. S., **Peterson, J. C.**, ... Schulz, E. (2025). A foundation model to predict and capture human cognition. *Nature*, 644(8078), 1002-1009.

J12. Reichman, D., **Peterson, J. C.**, & Griffiths, T. L. (2024). Machine learning for modeling human decisions. *Decision*, 11(4), 619.

J11. Marjeh, R., Jacoby, N., **Peterson, J. C.**, & Griffiths, T. L. (2024). The Universal Law of Generalization Holds for Naturalistic Stimuli. *Journal of Experimental Psychology: General*, 153(3), 573.

J10. Agrawal, M., **Peterson, J. C.**, Cohen, J. D., & Griffiths, T. L. (2023). Stress, intertemporal choice, and mitigation behavior during the COVID-19 pandemic. *Journal of Experimental Psychology: General*, 152(9), 2695–2702.

J9. Jha, A., **Peterson, J. C.**, Griffiths, T. (2023). Extracting low-dimensional psychological representations from convolutional neural networks. *Cognitive Science*, 47(1), e13226.

J8. **Peterson, J. C.**, Uddenberg, S., Griffiths, T., Todorov, A., & Suchow, J. W. (2022). Deep models of superficial face judgments. *Proceedings of the National Academy of Sciences*, 119(17), e2115228119.

J7. **Peterson, J. C.**, Bourgin, D. D., Agrawal, M., Reichman, D., & Griffiths, T. L. (2021). Using large-scale experiments and machine learning to discover theories of human decision-making. *Science*, 372(6547), 1209-1214.

J6. Battleday, R. M., **Peterson, J. C.**, & Griffiths, T. L. (2021). From convolutional neural networks to models of higher-level cognition (and back again). *Annals of the New York Academy of Sciences*, 40, 1-24.

J5. Agrawal, M., **Peterson, J. C.**, Griffiths, T. (2020). Scaling up Psychology via Scientific Regret Minimization. *Proceedings of the National Academy of Sciences*, 117(16), 8825-8835.

J4. Battleday, R.*, **Peterson, J. C.***, & Griffiths, T. (2020). Capturing human categorization of natural images at scale by combining deep networks and cognitive models. *Nature Communications*, 11(1), 1-14.

* equal contribution

J3. **Peterson, J. C.***, Chen, D.*, & Griffiths, T. (2020). Parallelograms revisited: Exploring the limitations of vector space models for simple analogies. *Cognition*, 205, 104440.

* equal contribution

J2. **Peterson, J. C.**, Abbott, J., & Griffiths, T. (2018). Evaluating (and improving) the correspondence between deep neural networks and human representations. *Cognitive Science*, 42(8), 2648-2669.

J1. Janata, P., **Peterson, J. C.**, Ngan, C., Keum, B., Whiteside, H., & Ran, S. (2018). Psychological and Musical Factors Underlying Engagement with Unfamiliar Music. *Music Perception: An Interdisciplinary Journal*, 36(2), 175-200.

PEER-REVIEWED CONFERENCE PAPERS

C20. Liu, R., Geng, J., **Peterson, J. C.**, Sucholutsky, I., & Griffiths, T. L. (2025). Large language models assume people are more rational than we really are. In *Proceedings of the 13th International Conference on Learning Representations (ICLR)*.

C19. Sucholutsky, I., Battleday, R., Collins, K., Marjeh, R., **Peterson, J. C.**, Singh, P., Bhatt, U., Jacoby, N., Weller, A., & Griffiths, T. L. (2023). On the Informativeness of Supervision Signals. *Uncertainty in Artificial Intelligence*. PMLR.

C18. **Peterson, J. C.**, Mancoridis, M., Griffiths, T. (2023). To each their own theory: Exploring the limits of individual differences in decisions under risk. In *Proceedings of the Annual Meeting of the Cognitive Science Society*.

C17. Grewal, K., **Peterson, J. C.**, Thompson, B., Griffiths, T. (2021). Exploring the Structure of Human Adjective Representations. *NeurIPS 2021 Workshop on Shared Visual Representations in Human & Machine Intelligence*.

C16. Singh, P., **Peterson, J. C.**, Battleday, R., Griffiths, T. (2020). End-to-end Deep Prototype and Exemplar Models for Predicting Human Behavior. *Proceedings of the 42nd Annual Conference of the Cognitive Science Society*.

C15. Jha, A., **Peterson, J. C.**, Griffiths, T. (2020). Extracting low-dimensional psychological representations from convolutional neural networks. *Proceedings of the 42nd Annual Conference of the Cognitive Science Society*.

C14. **Peterson, J. C.***, Battleday, R.*, Griffiths, T., & Russakovsky, O. (2019). Human uncertainty makes classification more robust. *Proceedings of the International Conference on Computer Vision*.

* equal contribution

C13. Bourgin, D.* , **Peterson, J. C.***, Reichman, D., Griffiths, T., & Russell, S. (2019). Cognitive model priors for predicting human decisions. *Proceedings of the International Conference on Machine Learning*.

* equal contribution

- C12. Grant, E., **Peterson, J. C.**, & Griffiths, T. (2019) Learning deep taxonomic priors for concept learning from few positive examples. *Proceedings of the 41st Annual Conference of the Cognitive Science Society*.
- C11. Agrawal, M., **Peterson, J. C.**, & Griffiths, T. (2019). Using machine learning to guide cognitive modeling: A case study in moral reasoning. *Proceedings of the 41st Annual Conference of the Cognitive Science Society*.
- C10. **Peterson, J. C.**, Suchow, J., Aghi, K., Ku, A., & Griffiths, T. (2018). Capturing human category representations by sampling in deep feature spaces. *Proceedings of the 40th Annual Conference of the Cognitive Science Society*.
- C9. **Peterson, J. C.**, Soulos, P., Nematzadeh, A., & Griffiths, T. (2018). Learning Hierarchical Visual Representations in Deep Neural Networks Using Hierarchical Linguistic Labels. *Proceedings of the 40th Annual Conference of the Cognitive Science Society*.
- C8. Suchow, J. C.*, **Peterson, J. C.*** & Griffiths, T.L. (2018). Learning a face space for experiments on human identity. *Proceedings of the 40th Annual Conference of the Cognitive Science Society*.
* equal contribution
- C7. **Peterson, J. C.**, & Griffiths, T. (2017). Evidence for the size principle in semantic and perceptual domains. *Proceedings of the 39th Annual Conference of the Cognitive Science Society*.
- C6. Chen, D., **Peterson, J. C.**, & Griffiths, T. (2017). Evaluating vector-space models of analogy. *Proceedings of the 39th Annual Conference of the Cognitive Science Society*.
- C5. **Peterson, J. C.**, Abbott, J., & Griffiths, T. (2016). Adapting Deep Network Features to Capture Psychological Representations. *Proceedings of the 38th Annual Conference of the Cognitive Science Society*.
- 🏆 **Computational Modeling Prize**
🏆 **Sister Conference Best Paper**
- C4. Tang, S., **Peterson, J. C.**, & Pardos, Z. (2016). Deep Neural Networks and How They Apply to Sequential Education Data. *Proceedings of the 3rd Annual ACM Conference on Learning at Scale*.
- C3. Palmer, S. E., & **Peterson, J. C.** (2016). Hierarchical structure of musical and visual meter in cross-modal "fit" judgments. In *Proceedings of the 14th International Conference on Music Perception and Cognition*. San Francisco, CA.
- C2. Dubey, R.*, **Peterson, J. C.***, Khosla, A., Yang, M., & Ghanem, B. (2015). What makes an object memorable? *Proceedings of the International Conference on Computer Vision (ICCV)*.
* equal contribution
- C1. **Peterson, J. C.**, Pardos, Z., Rau, M., Swigart, A., Colin, G., & McKinsey, J. (2015). Understanding Student Success in Chemistry using Gaze Tracking & Pupillometry. *Proceedings of the Artificial Intelligence in Education Conference*.

WORKSHOP PAPERS (NON-ARCHIVAL)

W3. **Peterson, J. C.**, Aghi, K., Suchow, J. W., Ku, A., & Griffiths, T. L. (2018). Capturing human category representations by sampling in deep feature spaces. *Presented in the Workshop Track of the 6th International Conference on Learning Representations (ICLR)*, Vancouver, Canada.

W2. Grant, E., Finn, C., **Peterson, J. C.**, Abbott, J. T., Levine, S., Griffiths, T. L., & Darrell, T. (2017). Concept acquisition via meta-learning: Few-shot learning from positive examples. *Presented at the Workshop on Cognitively Informed Artificial Intelligence at NeurIPS*, Long Beach, CA.

W1. **Peterson, J. C.**, Soulos, P., Nematzadeh, A., & Griffiths, T. L. (2017). Multi-level Classification: Implications for Human-like Generalization. *Presented at the Visually Grounded Interaction and Language Workshop at NeurIPS*, Long Beach, CA.

BOOK CHAPTERS

Tang, S., **Peterson, J. C.**, & Pardos, Z. (2017). Predictive modelling of student behaviour using granular large-scale action data. *The Handbook of Learning Analytics*, 223-233.

FEATURES OF MY WORK

Plonsky, O., & Erev, I. (2021). To predict human choice, consider the context. *Trends in Cognitive Sciences*, 25(10), 819-820.

Bhatia, S., & He, L. (2021). Machine-generated theories of human decision-making. *Science*, 372(6547), 1150-1151.

TALKS

Invited Talks & Seminars

Brown University, Data Science Initiative & Dept. of CLPS, Colloquium, April 2023
Building a data science of the mind

University of California, Irvine, Department of Cognitive Sciences, Colloquium, March 2023
Leveraging machine learning to understand human behavior

Georgia Institute of Technology, School of Interactive Computing, Colloquium, Jan 2023
Using large datasets & machine learning to model human behavior

Rensselaer Polytechnic Institute, Department of Cognitive Science, Colloquium, Jan 2023
Using large datasets & machine learning to model human behavior

UC Berkeley, Haas School of Business, Shansby Marketing Seminar Series, Nov 2022
Discovering theories with machine learning

Stanford University, Department of Psychology, Colloquium, Feb 2022
What can big data offer to psychologists?

Workshop on Scaling Cognitive Science, CogSci, 2020
Scaling choices and categories
<https://pushkin-consortium.github.io/cogsci-workshop>

Emerging Area of Research (EAR) workshop, IU Bloomington, May 17-18, 2019
Evaluating (and improving) the correspondence between deep neural networks and humans
<https://www.brainnetworkslab.com/ear-workshop-2019>

IJCAI, Sister Conference Best Paper Track, 2017
Adapting Deep Network Features to Capture Psychological Representations

Workshop on Deep Learning in Computational Cognitive Science, CogSci, 2017
Comparing neural network representations to human behavior

15th Workshop on Neural Computation and Psychology, 2016
Deep CNN features as a basis for modeling human representations

Co-Authored Conference Talks (Presented by Collaborators)

Binelli, C. [Presenter], & **Peterson, J. C.** (2026). Building Better Theories Through Prediction and Explanation. *To be presented as a plenary talk at the Italian Conference on Computational Social Science*, Turin, Italy.

Agrawal, M. [Presenter], **Peterson, J. C.**, & Griffiths, T. (2019). Understanding a Large Dataset of Moral Decisions Through Scientific Regret Minimization. *Presented as a talk at the 1st RLDM Workshop on Moral Decision Making*.

Suchow, J. W. [Presenter], **Peterson, J. C.**, & Griffiths, T. (2018). A learned generative model of faces for experiments on human identity. *Presented as a talk at the Vision Sciences Society conference*, St. Pete, FL.

POSTERS

P17. Slaughter, J. [Presenter], **Peterson, J. C.**, Jordan, M. C., & Cohen, D. (2021). Using Convolutional Neural Networks to Predict Human Judgments and Neural Representations. *Presented as a poster at the 2021 Leadership Alliance National Symposium (LANS)*.

P16. Slaughter, J. [Presenter], **Peterson, J. C.**, Jordan, M. C., & Cohen, D. (2020). Towards Using Convolutional Neural Networks to Predict Human Behavior and Neural Representations. *Presented as a poster at the 2020 Leadership Alliance National Symposium (LANS)*.

- P15. **Peterson, J. C.**, Soulos, P., Nematzadeh, A., & Griffiths, T. (2019). Learning to generalize like humans using basic-level object labels. *Presented as a poster at the Vision Sciences Society conference*, St. Pete, FL.
- P14. **Peterson, J. C.**, Aghi, K., Suchow, J. W., Ku, A., Griffiths, T. (2018). Sampling from object and scene representations using deep feature spaces. *Presented as a poster at the Vision Sciences Society conference*, St. Pete, FL.
- P13. **Peterson, J. C.**, Abbott, J. Battleday, R., Suchow, J. W. & Griffiths, T. L. (2017). Using large natural image datasets to study cognition. *Presented as a poster at the 58th Annual Meeting of the Psychonomic Society*, Vancouver, Canada, November 2017.
- P12. Battleday, R., **Peterson, J. C.**, & Griffiths, T. (2017). Modeling human categorization of natural images using deep feature representations. *Presented as a poster at the 39th Annual Conference of the Cognitive Science Society*.
- P11. **Peterson, J. C.**, Abbott, J., & Griffiths, T. (2016). Deep CNN features approximate human psychological representations. *Representation Learning in Artificial and Biological Neural Networks Workshop at NIPS 2016*.
- P10. **Peterson, J.**, Langlois, T., & Palmer, S. E. (2016). Emotionally-mediated crossmodal correspondences are sensitive to context. *Presented as a poster at the 14th International Conference on Music Perception and Cognition*, San Francisco, CA, July 2016.
- P9. Langlois, T. [Presenter], **Peterson, J.**, & Palmer, S. E. (2016). Emotional mediation in crossmodal correspondences from music to visual texture. *Presented as a poster at the 14th International Conference on Music Perception and Cognition*, San Francisco, CA, July 2016.
- P8. **Peterson, J. C.**, & Palmer, S. (2015). Emotionally mediated cross-modal correspondences affect classification performance. *Presented as a poster at the 37th Annual Meeting of the Cognitive Science Society*, Pasadena, CA, July 2015.
- P7. Dubey, R. [Presenter], **Peterson, J. C.**, Ghanem, B., Yang, M., & Hsieh, P. (2015). Exploring the visual components that make an image memorable. *Presented as a poster at the 14th Annual Meeting of the Vision Sciences Society*, St. Pete Beach, FL, May 2015.
- P6. **Peterson, J. C.**, & Palmer, S. (2015). Emotion mediation in audio-visual correspondences among natural sounds, texture, and art. *Presented as a poster at the 14th Annual Meeting of the Vision Sciences Society*, St. Pete Beach, FL, May 2015.
- P5. Langlois, T. [Presenter], **Peterson, J. C.**, & Palmer, S. (2015). Relations among Visual Texture, Musical Features, and Emotion. *Presented as a poster at the 14th Annual Meeting of the Vision Sciences Society*, St. Pete Beach, FL, May 2015.
- P4. Hatem, J. [Presenter], **Peterson, J. C.**, Langlois, T., & Palmer, S. (2015). Texture-Color Associations in Non-synesthetes. *Presented as a poster at the 14th Annual Meeting of the Vision Sciences Society*, St. Pete Beach, FL, May 2015.

P3. **Peterson, J. C.**, Langlois, T., & Palmer, S. (2014). The texture of musical sounds: Cross-modal associations from musical timbres and intervals to visual textures. *Presented as a poster at the 13th Annual Meeting of the Vision Sciences Society*, St. Pete Beach, FL, May 2014.

P2. Langlois, T. [Presenter], **Peterson, J. C.**, & Palmer, S. (2014). Visual Texture, Music, and Emotion. *Presented as a poster at the 13th Annual Meeting of the Vision Sciences Society*, St. Pete Beach, FL, May 2014.

P1. Janata, P. [Presenter], & **Peterson, J.** (2013). On the determinants of listening time for novel musical excerpts. *Presented as a poster at the Biennial Meeting of the Society for Music Perception and Cognition (SMPC)*, Toronto, ON, Canada, August 2013.

PRESS

New York Times, 2025

Scientists Use A.I. to Mimic the Mind, Warts and All

[nytimes.com/2025/07/02/science/ai-psychology-mind.html](https://www.nytimes.com/2025/07/02/science/ai-psychology-mind.html)

APS Observer, 2022

How Machine Learning is Transforming Psychological Science

psychologicalscience.org/observer/machine-learning-transforming-psychological-science

TechXplore, 2022

Using deep learning to predict users' superficial judgments of human faces

techxplore.com/news/2022-04-deep-users-superficial-judgments-human.html

American Association for the Advancement of Science (AAAS), 2021

Machine Learning, Big Data Reveal New Theories of Human-Decision-Making

[aaas.org/news/machine-learning-big-data-reveal-new-theories-human-decision-making](https://www.aaas.org/news/machine-learning-big-data-reveal-new-theories-human-decision-making)

TechXplore, 2021

Using large-scale dataset experiments and machine learning to discover new theories of decision-making

techxplore.com/news/2021-06-large-scale-dataset-machine-theories-decision-making.html

Princeton University, 2021

To See Like a Human: The Quest After Aristotle's Holy Grail

cs.princeton.edu/news/to-see-like-a-human

New Scientist, 2019

AI learns to gamble illogically like humans to predict our behaviour

[newscientist.com/article/2207324-ai-learns-to-gamble-illogically-like-humans-to-predict-our-behaviour/](https://www.newscientist.com/article/2207324-ai-learns-to-gamble-illogically-like-humans-to-predict-our-behaviour/)

TechXplore, 2019

Infusing machine learning models with inductive biases to capture human behavior

techxplore.com/news/2019-06-infusing-machine-inductive-biases-capture.html

UC Davis College of Letters and Science Magazine, 2018
New major spans disciplines to study how we think and learn
lettersandscience.ucdavis.edu/matter-mind

The California Aggie, 2012
Undeclared? Try a new interdisciplinary field
theaggie.org/2012/09/27/undeclared-try-a-new-interdisciplinary-field/

AWARDS, HONORS, & SCHOLARSHIPS

5th Place in Track 1 of the 2019 Algonauts Challenge, 2019

1st Place, Choice Prediction Competition (CPC), 2018

<https://arxiv.org/abs/1904.06866>

Sister Conference Best Paper, 26th International Joint Conference on Artificial Intelligence, 2017

<https://ijcai-17.org/sister-conf.html>

Computational Modeling Prize in Perception/Action Category (\$1000)

39th Annual Conference of the Cognitive Science Society 2016

<https://web.archive.org/web/20220124075437/https://cogsci.mindmodeling.org/2016/pdfs/section0004.pdf>

Honorable Mention, National Science Foundation GRF, 2015

High Honors, UC Davis, 2012

H. & G. Smith Undergraduate Scholarship, UC Davis, 2010-2012

Dean's List, College of Letters and Science, UC Davis, 2010-2012

Entering Undergraduate Scholarship, UC Davis, 2010-2011

Parker Family Foundation Scholarship, UC Davis, 2010-2011

First Year Scholar Award, UC Davis, 2010

Valedictorian Honors, Folsom Lake College, 2010

Dean's List, Folsom Lake College, 2007-2010

Perry & Stella Scholarship, 2007

FELLOWSHIPS & GRANTS

DARPA I20 Grant (\$4,997,132, multi-institution grant with 6 other faculty), 2025-2027

Predicting algorithmic trust at scale

Innovation Fund for New Ideas in the Natural Sciences (PI: Alex Todorov), Princeton U., 2019

SocialGAN: Generating infinitely many hyper-realistic faces with a simple web application

National Science Foundation Grant (PI: Thomas Griffiths), 2018

Leveraging Deep Neural Networks for Understanding Human Cognition

Mark R. Rosenzweig Graduate Fellowship, 2017

Institute of Cognitive and Brain Sciences Research Grant, UC Berkeley, 2015
Neural Mechanisms in Timbre-Color Synesthesia

TEACHING

Instructor, Boston University, Spring 2025
DS-497: Data Science of the Mind (Special Topics in Social and Behavioral Sciences)

Instructor, Boston University, Fall 2024
DS-100: Data Speak Louder than Words

Instructor, Boston University, Spring 2024
DS-100: Data Speak Louder than Words

Guest Lecture on Similarity and Generalization, UC Berkeley, 2016
Computational Models of Cognition

Graduate Student Instructor, UC Berkeley, 2016
Computational Models of Cognition

Graduate Student Instructor, UC Berkeley, 2015
Computational Models of Cognition

Graduate Student Instructor, UC Berkeley, 2014
Research and Data Analysis in Psychology

Graduate Student Instructor, UC Berkeley, 2013
Research and Data Analysis in Psychology

Graduate Student Instructor, UC Berkeley, 2012
Research and Data Analysis in Psychology

Undergraduate Teaching Assistant, UC Davis, 2011
Research Methods in Psychology

GRADUATE STUDENTS

Jeff Hastings, Boston University, 2025-current
\$10,000 CDS Wexler Fellowship

Phillip Angelos, Boston University, 2025-current

Stella Si, Boston University, 2023-current

MENTEES & ADVISEES

Ryan Flynn, Boston University, 2025-current

Advising Research Project 2026

Advised Directed Study Project for Fall 2025

Stanley Huang, Boston University, 2025-current

Advising Research Project 2025-2026

Marina Mancoridis, Princeton University, 2022-2023

Advised Research Project 2023

Advised Research Project 2022

Aditi Jha, Princeton University, 2019-2021

Advised Research Project 2021

Supervised Graduate Class Research Project 2020

Supervised Graduate Class Research Project 2019

Shanka Subhra Mondal, Princeton University, 2019-2021

Advised Research Project 2021

Supervised Graduate Class Research Project 2020

Supervised Graduate Class Research Project 2019

Pulkit Singh, Princeton University, 2019-2020

Supervised Undergraduate Senior Thesis

 **Outstanding Computer Science Senior Thesis Prize**

 **Presented at Women in Machine Learning 2019 Workshop**

Taylor Jean-Jacques, Princeton University, 2019-2020

Supervised Undergraduate Senior Thesis

Sayeri Lala, Princeton University, 2019-2020

Supervised Graduate Class Research Project 2019

Supervised Graduate Class Research Project 2020

Zachary Abraham, Princeton University, 2019

Supervised Undergraduate Class Research Project

Simon Segert, Princeton University, 2019

Supervised Graduate Class Research Project

Shunyu Yao, Princeton University, 2019

Supervised Graduate Class Research Project

Sonia Murthy, Princeton University, 2018-2019

Supervised Undergraduate Senior Thesis

Ryan Chu, UC Berkeley, 2016
Supervised Undergraduate Research Project

Harrison James Ramsay, UC Berkeley, 2016
Supervised Undergraduate Honors Thesis

Jose Isaac Hatem, UC Berkeley, 2015
Supervised Undergraduate Honors Thesis

Phillip Tran, UC Berkeley, 2014
Getting into Graduate School (GiGS) Mentor

John Naulty, UC Berkeley, 2014
Getting into Graduate School (GiGS) Mentor

SERVICE TO THE ACADEMIC COMMUNITY

Professional Service

Ad-Hoc Grant Reviewer

National Science Foundation (2026)

Ad-Hoc Journal Reviewer

Cognitive Science (2019, 2022)

Decision (2023)

Management Science (2022)

Memory & Cognition (2019)

Nature Human Behaviour (2022)

Journal of Experimental Psychology: Learning, Memory, and Cognition (2021)

PLOS Computational Biology (2021)

Proceedings of the National Academy of Sciences (2025)

Psychological Review (2023)

Ad-Hoc Conference & Workshop Reviewer

Annual Conference of the Cognitive Science Society (2016 – 2026)

ACM Symposium on User Interface Software and Technology (2020)

International Conference on Learning Representations (2022)

Neural Information Processing Systems (2022, 2023, 2025)

Workshop Organization

Workshop on Shared Visual Representations in Human and Machine Intelligence
NeurIPS 2019 ([link](#)), NeurIPS 2020 ([link](#)), NeurIPS 2021 ([link](#)), NeurIPS 2022 ([link](#))

Workshop on Human and Machine Decisions
NeurIPS 2021 ([link](#))

Workshop on Combating the Climate Crisis with Cognitive Science
CogSci 2021 ([link](#))

University & Departmental Service

Psychological Department Newsletter, UC Berkeley, 2013-2015
Writer, Layout Editor

Graduate Assembly for Students in Psychology (GASP), UC Berkeley, 2013-2014
Member

Graduate Assembly for Students in Psychology (GASP), UC Berkeley, 2013-2014
Web Developer

Getting into Graduate School (GiGS) Program, UC Berkeley, 2013-2014
Graduate Student Mentor

Getting into Graduate School (GiGS) Program, UC Berkeley, 2013-2014
Web Developer

Originator / Designer of Cognitive Science Major, UC Davis, 2010-2012

DATASETS

90k human decisions for 2.4k two-player games from Zhu, Peterson, Enke & Griffiths (2025).
<https://osf.io/xrvaw>

One Million Impressions (OMI) face dataset, Peterson et al. (2022)
<https://www.github.com/jcpeterson/omi>

Adjective Ratings from Grewal, K., Peterson, J. C., Thompson, B., Griffiths, T. (2021)
<https://osf.io/n934t>

Choices13k: Human Responses for 10,000 Risky Choice Problems, Peterson et al. (2021)
<https://github.com/jcpeterson/choices13k>

Human Analogy and Relational Similarity Dataset, Peterson, Dawn, & Griffiths (2020)
<https://github.com/sdawnchen/vector-space-analogy-analysis>

CIFAR-10H: 500k Human Categorization Judgments, Peterson et al. (2019)
<https://github.com/jcpeterson/cifar-10h>

Ecological Concept Learning Dataset from Grant, Peterson, & Griffiths (2019)
<https://github.com/eringrant/cogsci-2019-concept-learning>

Image Similarity Judgments Dataset from Peterson, Abbott, & Griffiths (2016)

<https://github.com/jcpeterson/percept2vec>

Object Memory Dataset from Dubey & Peterson et al., (2015)

<http://cocosci.princeton.edu/jpeterson/objmem>

SOFTWARE

Human Risky Decision-Making (HURD) modeling toolkit

<https://github.com/jcpeterson/hurd>

OpenWebText: a tool for collecting large-scale natural language corpora

<https://github.com/jcpeterson/openwebtext>

VISUAL DEMONSTRATIONS

Generating hyper-realistic faces for use in vision science experiments

Presented with Jordan Suchow and Stefan Uddenberg at the VSS 2019 Demo Night

<https://www.visionosciences.org/2019-demo-night>

PATENTS

Data-driven, photorealistic social face-trait encoding, prediction, and manipulation using deep neural networks

Original Patent:

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Continuation:

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