# JORDAN WILLIAM SUCHOW

jws@stevens.edu
http://suchow.io

## EDUCATION & EMPLOYMENT

2019—  Stevens Institute of Technology
*Assistant Professor*

2014–18  University of California, Berkeley
*Postdoctoral fellow*
*Advisor:* Prof. Thomas Griffiths

2014  Harvard University
*Ph.D. in Psychology*
*Advisor:* Prof. George Alvarez

2011  Harvard University
*A.M. in Psychology*

2009  Brandeis University
*B.S. in Computer Science*

—2008  New York University
Psychology & Neural Science
*Junior Research Scientist*
*Advisor:* Prof. Denis Pelli

## PUBLISHED WORKS

***Topics:*** ● Crowdsourcing & digital platforms ● Perception & cognition ● Scaling up experiments

1.  Suchow, J. W. & Alvarez, G. A. (2011). Motion silences awareness of visual change. *Current Biology*, 21, 140–143.  ●

2.  Suchow, J. W. (2011). NPG's policy on authorship[1]. *Nature*, 477, 244.

3.  Suchow, J. W. & Pelli, D. G. (2012). Learning to detect and combine the features of an object. *Proceedings of the National Academy of Sciences,* 110(2), 785–790.  ●●

4.  Fougnie, D., Suchow, J. W., & Alvarez, G. A. (2012). Variability in the quality of visual working memory. *Nature Communications*, 3(1229), 1–8.  ●

5.  Suchow, J. W.*, Brady, T. F.*, Fougnie, D., & Alvarez, G. A. (2013). Modeling visual working memory with the MemToolbox. *Journal of Vision,* 13(10):9, 1–8.  ●

6.  Suchow, J. W., Fougnie, D., Brady, T. F. & Alvarez, G. A. (2014). Terms of the debate on the format and structure of visual memory. *Attention, Perception, & Psychophysics,* 76(7), 2071–2079.  ●

7.  Fan, J. E. & Suchow, J. W. (2014). The crowd is self-aware. Commentary on "Mapping collective behavior in the big-data era." *Behavioral and Brain Sciences*, 37(01), 81–82.  ●

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[1] N.B. A work of fiction, for now.

8.  Suchow, J. W. (2014). Measuring, monitoring, and maintaining memories in a partially observable mind. PhD Thesis, Harvard University.
    *Committee members:* Daniel Schacter, Martin Nowak, Patrick Cavanagh, George Alvarez

9.  Suchow, J. W. (2015). Building a social network one choice at a time. *PLoS ONE, 10(7),* e0133463.

10. Suchow, J. W. & Griffiths, T. L. (2016). Deciding to remember: memory maintenance as a Markov Decision Process. *Proceedings of the 38th Annual Conference of the Cognitive Science Society.*

11. Suchow, J. W., Pacer, M. D., & Griffiths, T. L. (2016). Design from zeroth principles. *Proceedings of the 38th Annual Conference of the Cognitive Science Society.*

12. Suchow, J. W., Fougnie, D. & Alvarez, G. A. (2016). Looking inwards and back: realtime monitoring of visual working memory. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 43(4),* 660–668.

13. Pacer, M. D. & Suchow, J. W. (2016). Linting science prose and the science of prose linting. *SciPy — Proceedings of the 15th Python in Science Conference.*

14. Suchow, J. W. & Griffiths, T. L. (2016). Rethinking experiment design as algorithm design. *CrowdML — NIPS 2016 Workshop on Crowdsourcing and Machine Learning.*

15. Gates, M., Suchow, J. W., & Griffiths, T. L. (2017). Empirical tests of large-scale collaborative recall. *Proceedings of the 39th Annual Conference of the Cognitive Science Society.*

16. Langlois, T., Jacoby, N., Suchow, J. W., & Griffiths, T. L. (2017). Uncovering visual priors in spatial memory using serial reproduction. *Proceedings of the 39th Annual Conference of the Cognitive Science Society.*

17. Suchow, J. W. & Alvarez, G. A. (2017). Silencing the awareness of change. *The Oxford Compendium of Visual Illusions.* Oxford: Oxford University Press.

18. Suchow, J. W., Bourgin, D. D., & Griffiths, T. L. (2017). Evolution in mind: evolutionary dynamics, cognitive processes, and Bayesian inference. *Trends in Cognitive Sciences, 21(7),* 522–530.

19. Peterson, J., Aghi, K., Suchow, J. W., Ku, A., & Griffiths, T. L. (2018). Capturing human category representations by sampling in deep feature spaces. *Proceedings of the 40th Annual Conference of the Cognitive Science Society.*

20. Paxton, A., Morgan, T. J. H., Suchow, J. W., Griffiths, T. L. (2018). Interpersonal coordination of perception and memory in real-time online social interaction. *Proceedings of the 40th Annual Conference of the Cognitive Science Society.*

21. Suchow, J.W.*, Peterson, J.* & Griffiths, T.L. (2018). Learning a face space for experiments on human identity. *Proceedings of the 40th Annual Conference of the Cognitive Science Society.*

22. Suchow, J. W. (2018). Haven't we met before? On doppelgängers and perception. *Aeon.* https://aeon.co/ideas/havent-we-met-before-on-doppelgangers-and-perception

23.  Jupyter et al. (2019). nbgrader: A tool for creating and grading assignments in the Jupyter Notebook. *Journal of Open Source Education,* 2(11), 32.

24.  Langlois, T., Jacoby, N., Suchow, J. W., & Griffiths, T. L. (2019). Orthogonal multi-view three-dimensional object representations in memory revealed by serial reproduction. *Proceedings of the 41st Annual Conference of the Cognitive Science Society.*

25.  Morgan, T. J. H., Suchow, J. W., & Griffiths, T. L. (2020). What the Baldwin Effect affects depends on the nature of plasticity. *Cognition,* 197, 1–10.

26.  Morgan, T. J. H.*, Suchow, J. W.*, & Griffiths, T. L. (2020). Experimental evolutionary simulations of learning, memory and life-history. *Philosophical Transactions of the Royal Society B: Biological Sciences, 375(1803),* 1–11.

27.  Langlois, T., Jacoby, N., Suchow, J. W., & Griffiths, T. L. (2021). Serial reproduction reveals the geometry of visuospatial representations. *Proceedings of the National Academy of Sciences,* 118(13), e2012938118.

28.  Gates, V., Suchow, J. W., & Griffiths, T. L. (2021). Memory transmission in small groups and large networks: An empirical study. *Psychonomic Bulletin & Review.* https://doi.org/10.3758/s13423-021-02021eus-9.

29.  Todorov, A. T., Uddenberg, S. D., Peterson, J. C., Griffiths, T. L., & Suchow, J. W. (2022) Data-driven, photorealistic social face-trait encoding, prediction, and manipulation using deep neural networks (U.S. Patent No. 11,250,245). U.S. Patent and Trademark Office.

30.  Suchow, J. W. & Nickerson, J. V. (2022). Pragmatic delegation of work by humans and machines. *CHI 2022 Workshop on Trust and Reliance in AI-Human Teams* (TRAIT).

31.  Peterson, J. C., Uddenberg, S. D., Griffiths, T. L., Todorov, A. T. & Suchow, J. W. (2022). Deep models of superficial face judgments. *Proceedings of the National Academy of Sciences*, 119(17), e2115228119. doi:10.1073/pnas.2115228119.

32.  Suchow, J. W. (2022). Shadow banning, astroturfing, catfishing, and other online conflicts where beliefs about group membership diverge. Commentary on Pietraszewski (2021). *Behavioral and Brain Sciences.* 45:e122. doi:10.1017/S0140525X21001448

33.  Gürkan, N. & Suchow, J. W. (2022). Learning and enforcing a cultural consensus in online communities. *CogSci* 2022.

34.  Suchow, J. W. & Ashrafimoghari, V. (2022). The paradox of learning categories in a market that values rarity: a case study of NFTs & The Bored Ape Yacht Club. *CogSci* 2022

35.  Morgan, T. J. H.*, Suchow, J. W.*, & Griffiths, T.L. (2022). The experimental evolution of human culture: flexibility, fidelity and environmental instability. *Proceedings B*, 289, 20221614. https://doi.org/10.1098/rspb.2022.1614

36.  Yu, Y. & Suchow, J. W. (2022). Deep tensor factorization models of first impressions. *SVRHM 2022 workshop at NeurIPS.*

37. Gürkan, N. & Suchow, J. W. (2022). Cultural alignment of machine-vision representations. *svrhm 2022 workshop at NeurIPS*.

38. Suchow, J. W. (2023). Scaling up behavioral studies of visual memory. *Nature Human Behavior*.

39. Gürkan, N. & Suchow, J. W. (2023). Predicting judgment of food healthiness with deep latent-construct cultural consensus theory. *CogSci* 2023.

40. Almaatouq, A., Griffiths, T. L., Suchow, J. W., Whiting, M. E., Evans, J. A., & Watts, D. (*in press*). Beyond playing 20 questions with nature: integrative experiment design in the social and behavioral sciences. *Behavioral and Brain Sciences*.

41. Almaatouq, A., Griffiths, T. L., Suchow, J. W., Whiting, M. E., Evans, J., Watts, D. J. (*in press*). Replies to commentaries on beyond playing 20 questions with nature. *Behavioral and Brain Sciences*, 1–6. doi:10.1017/ S0140525X23002789

42. Todorov, A. T., Uddenberg, S. D., Peterson, J. C., Griffiths, T. L., & Suchow, J. W. (2023) Data-driven, photorealistic social face-trait encoding, prediction, and manipulation using deep neural networks (U.S. Patent No. 11,727,717; Continuation of U.S. Patent No. 11,250,245). U.S. Patent and Trademark Office.

PUBLISHED WORKS ARISING FROM MASS COLLABORATIONS

43. Landy, J. F., Jia, M., Ding, I. L., Viganola, D., Tierney, W., …, Suchow, J. W., …, Uhlmann, E. L. (2020). Crowdsourcing hypothesis tests: Making transparent how design choices shape research results. *Psychological Bulletin*, 146(5), 451–479.

44. Almaatouq, A. Becker, J. A., Bernstein, M. S., Botto, R., Bradlow, E., Damer, E., …, Suchow, J. W., … Ming, Y. (2021). Scaling up experimental social, behavioral, and economic science. *OSF White Paper*. https://doi.org/10.17605/OSF.IO/KNVJS

45. Jones, B. C., DeBruine, L. M., Flake, J. K., Liuzza, M., Antfolk, J., Arinze, N. C., …, Suchow, J. W., …, Coles, N. A. (2021). To which world regions does the valence–dominance model of social perception apply? *Nature Human Behavior, 5,* 159–169.

46. Wang, K., Goldenberg, A., Dorison, C. A., Miller, J. K., Uusberg, A., Lerner, J. S., …, Suchow, J. W., …, Moshontz, H. (2021). A multi-country test of brief reappraisal interventions on emotions during the COVID-19 pandemic. *Nature Human Behavior, 5,* 1089–1110.

47. Dorison, C. A., Lerner, J. S., Heller, B. H., Rothman, A. J., …, Suchow, J. W., …, Coles, N. A. (2022). In COVID-19 health messaging, loss framing increases anxiety without concomitant benefits: Experimental evidence from 84 countries. *Affective Science.* doi:10.1007/s42761-022-00128-3

48. Legate, N., Ngyuen, T., Weinstein, N., Moller, A., Legault, L., …, Suchow, J. W., …, Primbs, M.A. (2022). A global experiment on motivating social distancing during the COVID-19 pandemic. *Proceedings of the National Academy of Sciences, 119*(22), e2111091119.

49. Buchanan, E.M., Lewis, S.C., Paris, B., et al. (2023). The Psychological Science Accelerator's COVID-19 rapid-response dataset. *Scientific Data*, 10, 87.

$3,813,000 in total funding, $839,000 as PI.

2021–2023    Corporate support of research from a Fortune 500 financial services company for research on Bayesian data fusion and related techniques ($210,000; PI).

2020    Subcontract on DARPA SCORE program via the Center for Open Science for project "Data Enhancement to the DARPA SCORE Claims Dataset" ($15,000; PI).

2020    Subcontract on DARPA SCORE program via the Center for Open Science for project "Replication of Long et al. (2015)" ($10,000; PI).

2019–2020    Phase II of DARPA cooperative agreement awarded under the *Defense Sciences Office* for project "Culture on a chip" as part of the Next Generation Social Science (NGS2) program. Sub-award, with UC Berkeley as prime ($606,000; PI).

2016–2018    Phase I of DARPA cooperative agreement awarded under the *Defense Sciences Office,* for project "Culture-on-a-chip computing: crowdsourced simulations of culture, group formation, collective identity," as part of the Next Generation Social Science (NGS2) program ($2,800,000; co-PI).

2014–2016    NSF Postdoctoral Research Fellowship awarded under the *Directorate for Social, Behavioral & Economic Sciences,* for project "The dynamics of updating and transmitting individual and collective memories"($172,000; co-PI).

SOFTWARE, HARDWARE, & INVENTIONS

1.  Dallinger, http://docs.dallinger.io/. Laboratory automation for the behavioral and social sciences; human culture on a chip.

2.  MemToolbox, http://memtoolbox.org. A MATLAB toolbox for Bayesian modeling of  visual working memory.

3.  Wallace, http://github.com/suchow/Wallace. A platform for "simulating" cultural evolution in structured populations using crowdsourced experiments with people.

4.  proselint, http://github.com/amperser/proselint. A linter for prose.

5.  Dissertate, https://github.com/suchow/Dissertate. Beautiful LATEX templates for a dissertation.

6.  nbgrader, https://nbgrader.readthedocs.io. A tool that facilitates creating and grading assignments in the Jupyter notebook. Project led by Jessica Hamrick and Project Jupyter.

7.  Autonudger. An iPhone-based commitment device that monitors movement and exercise, nudging the user towards better behavior.

8.  LQQK, an Arduino-based wristband that facilitates visual experience sampling.

9.  "Antisilencing," https://vimeo.com/34934039.
    Invention reported to Harvard's *Office of Technology Development* in 2012.

10.  "Methods and compositions for determining differences in taste perception."

Invention reported to UC Berkeley's *Office of Intellectual Property and Industry Research Alliances* in 2015.

11. "Data-driven, photorealistic social face-trait encoding, prediction, and manipulation using deep neural networks." With Alex Todorov, Stefan Uddenberg, Joshua Peterson, and Tom Griffiths. Patent application filed in 2021, issued in 2022, with continuation in 2023.

12. "The total eclipse ban." Invention reported to Stevens' Office of Innovation and Entrepreneurship in 2021.

13. "Information systems that detect, diagnose, and mitigate cognitive biases." Invention reported to Stevens' Office of Innovation and Entrepreneurship in 2023.

### VISUAL DEMONSTRATIONS

1. *"Silencing."* http://visionlab.harvard.edu/silencing/.
   (with George Alvarez)
   Presented at the Vision Sciences Society's *Demo Night* in 2010.
   ⚡ *1st prize*, Neural Correlate Society's *2011 Best visual illusion of the year contest*

2. *"Disembodied eyes and mouth illusion."* visionlab.harvard.edu/upsidedown/.
   (with Ken Nakayama and Maryam Vaziri-Pashkam)
   Presented at the Vision Sciences Society's *Demo Night* in 2011.

3. *"Touching and interpreting hallucinated patterns in dynamic visual noise."*
   (with Justin Jungé and George Alvarez)
   Presented at the Vision Sciences Society's *Demo Night* in 2012.

4. *"Reflections on a true mirror."*
   (with Jason Haberman)
   Presented at the Vision Sciences Society's *Demo Night* in 2013.

5. *"SocialGAN."*
   (with Josh Peterson and Stefan Uddenberg)
   Presented at the Vision Sciences Society's *Demo Night* in 2019.

### TALKS, PRESENTATIONS, TUTORIALS & POSTERS

1. Suchow, J. W. (2023). Invited talk on generative A.I. at SP Jain Institute of Management & Research in Mumbai, India, presented virtually.

2. Suchow, J. W.; Burton, L.; and Ashrafimoghari, V. (2023). The Design and Operation of Digital Platforms under Folk Theories of Sociotechnical Systems. *AMCIS 2023 Proceedings*.

3. *Faculty keynote speaker*, Graduate convocation ceremony, Stevens Institute of Technology.

4. *Panelist*, Professional development workshop on experimental digital platforms at the Academy of Management CTO division.

5. Fang, Y., Ortega, J., Gürkan, N., Suchow, J. W., Whitney, D. (2023). Inferential tracking reveals context is more informative than faces in judgments of trustworthiness. Presented as a poster at the *Vision Sciences Society* conference in St. Pete, FL.

6. Suchow, J. W. (2023). The design and operation of digital platforms under folk theories of sociotechnical systems. Talk at NEDSI 2023 in Arlington, VA.

7. Suchow, J. W. (2022). The design and governance of digital platforms under folk theories of sociotechnical systems. Talk at *The Eighteenth Annual SIG Cognitive Research Workshop at ICIS 2022* in Copenhagen, Denmark.

8. Gürkan, N., & Suchow, J. W. (2022). The infinite cultural consensus model. Talk at virtual *MathPsych/ICCM* 2022.

9. Buchanan, E.M., Cuccolo, K., Lewis, S., …, Suchow, J. W., …, et al. (2022). Is priming consistent across languages? Preliminary findings from the SPAML: Semantic Priming Across Many Languages. Presented at the Annual Meeting of the Psychonomic Society, Boston, MA.

10. Gürkan, N. & Suchow, J. W. (2022). A virtual assistant for moderators: enforcing social norms in online communities. Presented at NEDSI 2022 in Newark, NJ.

11. Ashrafimoghari, V. & Suchow, J. W. (2022). A game-theoretic model of consumer behavior under the Pay-What-You-Want pricing strategy. Presented at NEDSI 2022 in Newark, NJ.
    ⋀ Best paper award in the "Application of theory" category

12. Yu, Y., Yang, R., Suchow, J. W., & Liu, R. (2022). Deep modular co-attention networks for online product matching. Presented at NEDSI 2022 in Newark, NJ.

13. Burton, L., Ashrafimoghari, V. & Suchow, J. W. (2022). Transparency in online community moderation: the case of shadowbanning. Presented at NEDSI 2022 in Newark, NJ.

14. Saad–Lessler, J., Ashrafimoghari, V., & Suchow, J. W. (2022). Can a virtual 'pet' take a bite out of the savings shortfall? Presented as a poster at ASSA 2022 Virtual Annual Meeting.

15. Suchow, J. W., Gürkan, N. & Peterson, J. C. (2021). When synthetic portraits do not preserve privacy. Presented at *MathPsych* 2021 in a virtual setting.

16. Gürkan, N. & Suchow, J. W. (2021). Explaining away differences in face matching. Presented at *MathPsych* 2021 in a virtual setting.

17. Buchanan, E. M., Cuccolo, K., Lewis, S., Evans, T., Geiger, S., Ribeiro, G.,…, Suchow, J. W.,…, & Elsherif, M. M. (2021). Creating a cross-referenced multi-linguistic dataset to investigate semantic priming. Presented at the *Annual Meeting of the Psychonomic Society*.

18. Buchanan, E. M., Cuccolo, K., Lewis, S., Evans, T., Geiger, S., Ribeiro, G., …, Suchow, J. W., …, & Elsherif, M. M. (2021). Adaptive algorithms for stimuli sampling in cognitive studies. Presented at the *Annual Meeting of the Society for Computation in Psychology*.

19. Gürkan, N. & Suchow, J. W. (2021). Causal inference in face identification, matching, and verification. Presented virtually as a poster at the annual *Vision Sciences Society* conference.

20. Suchow, J. W. (2020). Closed-loop crowdsourcing and active experiment design. Presented as a talk at the "Optimal experimental design: developments and applications" symposium at *MathPsych* 2020 in Toronto, Canada.

21. Suchow, J. W. (2020). Why Bayesian optimal experiment design? Presented as a talk and tutorial at the Scaling Cognitive Science Workshop in Princeton, NJ.

22. Suchow, J. W. (2020). Dallinger. Presented as a talk and tutorial at the Scaling Cognitive Science Workshop in Princeton, NJ.

23. Pincus, J. & Suchow, J. W. (2020). Estimating the dimensionality of face space empirically. Presented as a poster at the *42nd Annual Conference of the Cognitive Science Society* in Toronto, Canada.

24. Gürkan, N. & Suchow, J. W. (2020). The Adaptive Glasgow Face Matching Task. Presented as a poster at the *42nd Annual Conference of the Cognitive Science Society* in Toronto, Canada.

25. Pincus, J. & Suchow, J. W. (2020). Estimating the dimensionality of face space empirically. Presented at *Neuromatch 2020*.

26. Pincus, J. & Suchow, J. W. (2020). Estimating the dimensionality of face space empirically. Presented as a poster at the annual *Vision Sciences Society* conference in St. Pete, FL.

27. Suchow, J. W. & Griffiths, T. L. (2020). Memory maintenance in a partially observable mind: rationally deciding what to maintain. Presented as a talk at the 2020 Context and Episodic Memory Symposium (CEMS) in Philadelphia, PA.

28. Suchow, J. W. (2020). Dallinger. Presented as a tutorial at the Max Planck Institute for Empirical Aesthetics in Frankfurt, Germany.

29. Lall, V. H., Suchow, J. W., Malkomes, G., & Griffiths, T. L. (2019). Automated cognitive modeling with Bayesian active model selection. Presented as a poster at *MathPsych 2019* in Montreal, Canada.

30. Langlois, T., Jacoby, N., Suchow, J. W., & Griffiths, T. L. (2019). Orthogonal multi-view three-dimensional object representations in memory revealed by serial reproduction. Presented as a poster at the *Vision Sciences Society* conference in St. Pete, FL.

31. Langlois, T., Jacoby, N., Suchow, J. W., & Griffiths, T. L. (2019). Biases in visual memory represent precision not prototypes. Presented as a poster at the *Vision Sciences Society* conference in St. Pete, FL.

32. Lall, V. H., Suchow, J. W., Malkomes, G., & Griffiths, T. L. (2019) Automated cognitive modeling with Bayesian active model selection. Presented as a poster at *ICCM 2019* in Montreal, Canada.

33. Suchow, J. W. & Griffiths, T. L. (2019). Learning to calibrate age estimates. Presented as a poster at the *Vision Sciences Society* conference in St. Pete, FL.

34. Suchow, J. W., Morgan, T. J. H., Lall, V. H., Hamrick, J. B., Meylan, S. C., …, & Griffiths, T. L. (2019) Fully automated behavioral experiments on cultural transmission through crowdsourcing. Presented as a talk at *SciPy* in Austin, TX.

35. Suchow, J. W., Morgan, T. J. H., Lall, V. H., Hamrick, J. B., Meylan, S. C., , & Griffiths, T. L. (2019) Fully automated behavioral experiments on cultural transmission through crowdsourcing. Presented as a poster at *Collective Intelligence* in Pittsburgh, PA.

36. Suchow, J. W. (2019). Scaling up experimental simulations of culture. Presented as a talk at *The Transmission of Songs in Birds, Humans, and Other Animals* workshop at Columbia University in New York, NY.

37. Peterson, J., Aghi, K., Suchow, J.W., Ku, A., & Griffiths, T. L. (2018). Capturing human category representations by sampling in deep feature spaces. *Sixth International Conference on Learning Representations* (ICLR), workshop track, in Vancouver, Canada.

38. Suchow, J. W. (2018). Presented at the New Members Symposium of the *13th International Conference of the Learning Sciences* (ICLS) in London, England.

39. Morgan, T. J. H., Suchow, J. W., & Griffiths, T. L. (2018). Experimental gene–culture coevolution of human social learning in a changing environment. *The Cultural Evolution Conference* in Tempe, AZ.

40. Suchow, J.W, Lall, Vishal H., Callaway, F., Pacer, M., & Griffiths, T.L. (2018). Towards closed-loop crowdsourcing and human computation. *The International Conference on Probabilistic Programming* (PROBPROG) in Cambridge, MA.

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

42. Peterson, J. C., Aghi, K., Suchow, J. W., Ku, A., Griffiths, T. L. (2018). Sampling from object and scene representations using deep feature spaces. Presented as a poster at the *Vision Sciences Society* conference in St. Pete, FL.

43. Paxton, A., Morgan, T. J. H., Suchow, J. W. & Griffiths, T. L. (2018). Low-level coordination in minimally interactive (online) contexts. Presented as a talk at the *Guy Van Orden UConn Workshop on Cognition and Dynamics*, XIII, in Storrs, CT.

44. Paxton, A., Suchow, J. W., Morgan, T. J. H., & Griffiths, T. L. (2018). The virtuous cycle of theory-building: improving theoretical understanding in the (online) lab and in the wild. Presented as a talk at the *SPSP Annual Convention* in Atlanta, GA.

45. Suchow, J.W. & Griffiths, T. L. (2018). Culture on a chip computing. Presented at the DARPA NGS2 PI meeting in Arlington, VA.

46. Suchow, J. W. (2018). Invited talk at Stevens Institute of Technology (Computer Science) in Hoboken, NJ.

47. Suchow, J. W. (2017). Algorithmic experimentation with Dallinger. Presented as a tutorial at the 2017 Estes Fund Data on the Mind Workshop in Berkeley, CA.

48. Peterson, J., 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* in Vancouver, Canada.

49. Paxton, A., Suchow, J. W., Morgan, T. J. H., & Griffiths, T. L. (2017). Exploring social behavior with Dallinger, an open-source experiment automation tool. Presented as a poster at the *58th Annual Meeting of the Psychonomic Society* in Vancouver, Canada.

50. Suchow, J. W. (2017). Invited talk at Stevens Institute of Technology (Information Systems) in Hoboken, NJ.

51. McDowell, M., Suchow, J. W., & Haberman, J. (2017). A preference for flipped depictions of self. Presented as a poster at the *Vision Sciences Society* conference in St. Pete, FL.

52. Suchow, J. W. (2016). Experiment design, algorithm design, and automation in the behavioral and social sciences. Presented as a talk at the CS Colloquium at Wellesley College in Wellesley, MA.

53. Suchow, J. W. (2016). Invited talk at Stanford University in Stanford, CA.

54. Suchow, J. W. (2016). Invited talk at Cornell Tech in New York City, NY.

55. Suchow, J. W., Fougnie, D., & Alvarez, G.A. (2016). Looking inwards and back:    realtime monitoring of visual working memory. Presented as a talk at the 24th *Annual Workshop on Object Perception, Attention, and Memory* conference in Boston, MA.

56. Suchow, J. W., Morgan, T. J. H., Hamrick, J., Pacer, M., Meylan, S. C. & Griffiths, T. L. (2016). Wallace: automating cultural evolution experiments through crowdsourcing. Presented as a tutorial at the *Proceedings of the 38th Annual Conference of the Cognitive Science Society* in Philadelphia, PA.

57. Suchow, J. W. & Griffiths, T. L. (2016). Deciding to remember: memory maintenance as a Markov Decision Process. Presented as a talk at the *Proceedings of the 38th Annual Conference of the Cognitive Science Society* in Philadelphia, PA.

58. Suchow, J. W. & Griffiths, T. L. (2016). Culture-on-a-chip computing. Presented as a talk and poster at the kickoff meeting for DARPA's Next Generation Social Science program in Arlington, VA.

59. Suchow, J. W., Pacer, M. D. & Griffiths, T. L. (2016). Design from zeroth principles. Presented as a poster at the *Proceedings of the 38th Annual Conference of the Cognitive Science Society* in Philadelphia, PA.

60. Pacer, M. D. & Suchow, J. W. (2016). Proselint: the linting of science prose and the science of linting prose. Presented as a talk at *Scientific Computing with Python 2016 (SciPy 2016)* in Austin, TX.

61. Suchow, J. W. (2016). Member of panel for session "Extracting knowledge from data: What can we learn from the mind and brain?" at the Data Science Summit for the Moore–Sloan Data Science Environment program.

62. Suchow, J. W. (2016). Invited talk at Wellesley College in Wellesley, MA.

63. Suchow, J. W. (2016). Invited talk at Mount Holyoke College in South Hadley, MA.

64. Suchow, J. W. (2016). Presentation at Proposer's Day for DARPA's Next Generation Social Science program in Arlington, VA.

65. Suchow, J. W., Morgan, T. J. H., Hamrick, J., Pacer, M., Meylan, S. C. & Griffiths, T. L. (2015). Wallace: A platform for simulating cultural evolution in structured populations online. Presented as a talk at the *Crowdsourcing and Online Behavioral Experiments* workshop at the *ACM Conference on Economics and Computation* in Portland, OR.

66. Suchow, J. W. (2015). Invited talk at Cornell University in Ithaca, NY.

67. Suchow, J. W. (2015). Invited talk at Tufts University in Medford, MA.

68. Suchow, J. W. (2015). Illusory amputation of the eye; adaptive methods for measuring aftereffect decay; the perception of age. Presented as a talk at the *Perception and Action* seminar at UC Berkeley.

69. Suchow, J. W. & Alvarez, G. A. (2014). The more you try to remember, the faster you forget: Load dependent forgetting and overreaching. Presented as a talk at the *Vision Sciences Society* conference in St. Petersburg, FL.

70. Suchow, J. W., Allen, B., Nowak, M. A. & Alvarez, G. A. (2013). Evolutionary dynamics of visual memory. Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

71. Suchow, J. W. (2013). Maintaining memories in a partially observable mind. Presented as a talk at the *Visual Attention Seminar* at Brigham & Women's Hospital in Cambridge, MA.

72. Herman, L., Suchow, J. W., & Alvarez, G. A. (2013). Frequency-based synesthetic associations between letters and colors. Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

73. Fougnie, D., Suchow, J. W., & Alvarez, G. A. (2013). Gradual decay and death by natural causes in visual working memory. Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

74. Alvarez, G. A., Brady, T. F., Fougnie, D. & Suchow, J. W. (2013). Beyond slots vs. resources. Presented as a talk in the symposium *The structure of visual working memory* at the *Vision Sciences Society* conference in Naples, FL.

75. Herman, L., Suchow, J. W., & Alvarez, G. A. (2013). Frequency-based synesthetic associations between letters and colors. Presented as a poster at the *Seventeenth International Conference on Cognitive and Neural Systems* in Boston, MA.

76. Brady, T. F., Suchow, J., Fougnie, D. & Alvarez, G. A. (2012). MemToolbox: A MATLAB toolbox for analyzing visual working memory experiments. Presented as a poster the *Portland Working Memory Conference*, Portland, OR.

77. Fougnie, D., Suchow, J. W., & Alvarez, G. A. (2012). Gradual decay and death by natural causes in visual working memory. Presented as a poster at the *Portland Working Memory Conference*, Portland, OR.

78. Suchow, J. W., Fougnie, D., & Alvarez, G. A. (2012). Visual working metamemory. Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

79. Fougnie, D., Suchow, J. W., & Alvarez, G. A. (2012). The volatility of working memory. Presented as a talk at the *Vision Sciences Society* conference in Naples, FL.

80. Suchow, J. W. (2012). Metamemory and evolutionary dynamics in cognitive processes. Presented as a talk at the *Cognition, Brain, and Behavior Seminar* at Harvard.

81. Fougnie, D., Suchow, J. W., & Alvarez, G. A. (2011). Variable precision among working memory representations. Presented as a talk at the *Object Perception, Attention, & Memory* conference in Seattle, WA.

82. Suchow, J. W. & Alvarez, G. A. (2011). Background motion silences awareness of foreground change. Presented as a poster at *SIGGRAPH* in Vancouver, Canada.
    ↯ *Semifinalist*, ACM Student research competition

83. Suchow, J. W. & Alvarez, G. A. (2011). Silencing awareness of change by background motion. Presented as a poster at the 15th annual meeting of the *Association for the Scientific Study of Consciousness* in Kyoto, Japan.

84. Haberman, J., Suchow, J. W., & Alvarez, G. A. (2011). The visual system adapts to mean orientation. Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

85. Suchow, J. W., & Alvarez, G. A. (2011). Which kinds of motion silence awareness of visual change? Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

86. Suchow, J. W., & Alvarez, G. A. (2010). Silent updating: cross-dimensional change suppression. *Journal of Vision, 10(7), 299.* Presented as a talk at the *Vision Sciences Society* conference in Naples, FL.

87. Suchow, J. W., & Pelli, D. G. (2008). Letter learning: feature detection and combination. *Journal of Vision, 9(6), 1133.* Presented as a poster at the *Vision Sciences Society* conference in Naples, FL.

88. Suchow, J. W. (2006). Feature integration during letter learning. Presented as a talk at *The Leadership Alliance* national symposium in Chantilly, VA.

89. Suchow, J. W. (2006). Feature integration during letter learning. Presented as a talk at the *NYU Summer Undergraduate Research Symposium* in New York, NY.

90. Suchow, J. W., & Pelli, D. G. (2005). Learning to identify letters: Generalization in high-level perceptual learning. *Journal of Vision, 5(8), 712.* Presented as a poster at the *Vision Sciences Society* conference in Sarasota, FL.

### ADVISING & COMMITTEE MEMBERSHIP (STEVENS INSTITUTE OF TECHNOLOGY)

Vahid Ashrafimoghari (*advisor*), Ph.D. in Business Administration, 2020—

Cheng Lu (*committee member*), P.h.D. in Financial Technology, 2019—

Yangyang Yu (*advisor*), Ph.D. in Data Science, 2019—

Necdet Gürkan (*advisor*), Ph.D. in Business Administration, 2019—

Alkim Avsar (*committee member*), Ph.D. in Computer Science awarded 2023

Xingjian Zhang (*committee member*), Ph.D. in Business Administration awarded 2023

Ambrosio Valencia-Romero (*committee member*), Ph.D. in Systems Engineering awarded 2021

Sujith Kochupurackamuriyil Sam (*advisor*), M.S. awarded 2020

### TEACHING (STEVENS INSTITUTE OF TECHNOLOGY)

| | |
|---|---|
| 2023 | *Instructor, Computational models of thought and behavior* |
| 2023 | *Instructor, Management of A.I. Technologies* |
| 2023 | *Instructor, Management of A.I. Technologies* |
| 2022 | *Instructor, Management of A.I. Technologies* |
| 2022 | *Instructor, Web Mining* |
| 2022 | *Instructor, Management of A.I. Technologies* |
| 2021 | *Instructor, Management of A.I. Technologies* |
| 2021 | *Instructor, Management of A.I. Technologies* |

2021  *Instructor, Computational models of thought and behavior*
2020  *Instructor, Computational models of thought and behavior*
2020  *Instructor, Web mining*
2020  *Instructor, Web mining*
2019  *Instructor, Web mining*

TEACHING (WELLESLEY COLLEGE)

2018  *Instructor, Cognition*

TEACHING (UC BERKELEY)

2015  *Lecturer*, 2 sections of *Computational models of cognition*

TEACHING (HARVARD)

2013  *Instructor, Contemporary issues in psychology: intensive cross-level analysis*
⋎ Derek Bok Center teaching award
⋎ George W. Goethals teaching award

2012  *Teaching fellow*, 2 sections of "Psychological Science", taught by Dan Gilbert

2012  *Instructor*, "Contemporary issues in psychology: intensive cross-level analysis"
⋎ George W. Goethals teaching award

2012  *Teaching fellow*, "MATLAB programming for behavioral testing", taught by George Alvarez

2011  *Teaching fellow*, 2 sections of "Psychological science", taught by Dan Gilbert

TEACHING TOOLS

QALMRI+, an extended worksheet and method for learning to read a journal article.

*Visual Quantitative Literacy Test*, versions 0.1–0.4. (with Justin Jungé)

Zipf It., an interactive tool for learning about Zipf's law.

AWARDS

(Best paper and presentation awards listed directly alongside publications above.)

2022–2025  *Presidential Fellow,* Stevens Institute of Technology

2022–2025  *Dean's Fellow,* Stevens Institute of Technology

2015–2016  *Fellow*, Center for Technology, Society, & Policy at UC Berkeley

2011  *Mind, Brain & Behavior Graduate Student Award,* Harvard University

2009–2012  *Sosland Fellow,* Harvard University

2005–2009  *Presidential Scholar,* Brandeis University

2005  *Semifinalist,* Intel Science Talent Search (formerly, Westinghouse STS),
for project "Learning to identify letters: Generalization in high-level perceptual learning", advised by Denis Pelli at NYU.

2014    Participant in a 2-week graduate summer school on brains, minds and machines at the *Marine Biological Laboratory* in Woods Hole, organized by the *Center for Brains, Minds, and Machines*.

2012    Research assistant in Vadodara, India, running a randomized controlled trial of mental abacus training in a local primary school. The project considered the effects of this training on mathematical ability and basic cognitive capacities, such as working memory.

2011    Participant in a 2-week graduate summer school in probabilistic models of cognition at UCLA's *Institute for Pure & Applied Mathematics*, organized by Josh Tenenbaum, Noah Goodman, and Alan Yuille.

2006    NSF Research Experience for Undergraduates, at New York University

2006    The Leadership Alliance Early Identification Summer Research Program

2003–2005    Columbia University Science Honors Program

## OUTREACH, MEDIA COVERAGE, AND GALLERY EXHIBITIONS

In 2021, the Mindworks museum in Chicago included a demonstration of the research in Peterson et al. (2022).

Wang et al. (2021) was covered by Vox.com.

Jones et al. (2021) and the PSA were covered by Vox.com.

In 2017, the Carl Bosch Museum in Heidelberg included a demonstration of the silencing illusion in a special exhibit on illusions.

Suchow, J. W. and Griffiths, T. L. (2016). Rethinking experiment design as algorithm design. *Follow the Crowd.*
https://humancomputation.com/blog/?p=9374

In 2016, Proselint reached the #1 spot on the front page of *Hacker News* and was covered by *Boing Boing*.

In 2015, Suchow (2011) was translated to audio in episode 397 of *StarShipSofa*.

Suchow & Pelli (2012) was covered in an interview by *Medical Xpress*.

Suchow & Alvarez (2011) was covered by *Scientific American*, *New Scientist*, The Washington Post, Slashdot, Gizmodo, Wired.co.uk and .it, MSNBC, CVC Radio, CBS, *Sciences et avenir*, and others. As of early 2022, the official demo page had been seen by 250,000 visitors and the YouTube demos had been played over 2,200,000 times. *The Exploratorium*, a museum of science, art, and human perception in San Francisco, holds a physical installation of silencing in its permanent collection.

Interview with *Nerve.com* published as 'Sex advice from neuroscientists' in June 2009.

Suchow, J. W. (2005). Seeing things: Visual perception research at NYU. *Imagine Magazine*, March 2005.

2023    *Co-organizer*, Professional development workshop on digital experimental platforms at the Academy of Management's CTO division.

2023    *Session Chair*, 3× sessions of SIG Cognitive Research at AMCIS 2023

2023    *Program Committee*, CogSci 2023

2022    *Program Committee,* WITS 2022 (Workshop on Information Technologies and Systems)

2022    *Associate Editor,* ICIS 2022

2022    *Program Committee*, CogSci 2022

2022—   *Advisory Board Member*, Pushkin experiment platform

2020    *Organizer*, Scaling Cognitive Science Workshop II (at CogSci 2020)

2020    *Organizer*, Scaling Cognitive Science Workshop I (at Princeton University)

2019    *Program committee*, The 11th ACM SIGCHI Symposium on Engineering Interactive Computing Systems

2015—   *Editorial Board*, Matters

2012    *Judge*, Neural Correlate Society's *2012 Best visual illusion of the year contest*

2011–2013   *Editorial board,* The New School Psychology Bulletin

2011–2013   *Scientific advisor* to Pubget, Inc.

2011–2012   e-print committee of the *Association for the Scientific Study of Consciousness*

### UNIVERSITY AND DEPARTMENTAL SERVICE

2019—   *Member,* BI&A Program Committee

2020—   *Advisor,* Academic advisor to ~20 undergraduate students

2020—   *Member,* School of Business Research Committee

2020—   *Member,* Business Administration Ph.D. Program Committee

2020—   *Member,* School of Business Graduate Marketing Committee

2020–2022   *Member,* Management Program Academic Committee

2020    *Member,* 150th Anniversary Academic Symposium Committee

2021    *Member,* Marketing Search Committee

2021    *Member,* Department of Computer Science Search Committee

2021    *Organizer,* AI & Cognitive Science Webinar Series

2021—   *Organizer,* Harvest Day

| | |
|---|---|
| 2021— | *Member,* SIAI Steering Committee |
| 2022— | *Member,* Academic Appeals Committee |
| 2022 | *Member,* SIAI Director Search Committee |
| 2022–2023 | *Course lead,* Noodle course conversion for BIA 668 |
| 2022— | *Member,* Committee for Stevens Core |
| 2023 | *Chair,* Subcommittee of the Committee for Stevens Core on Future of Technology on A.I. |
| 2022–2023 | *Member,* Ph.D. Handbook Subcommittee of the Business Administration Ph.D. Program Committee |
| 2022— | *Member,* School of Business Strategic Planning Committee |

**JOURNAL, CONFERENCE, AND GRANT REVIEWING**

*Ad hoc* reviewer for (alphabetical):

*Academy of Management Annual Meeting (MOC, TIM, & Symposia)*

AMCIS

*Attention, Perception, & Psychophysics*

*Cognition*

*Cognitive Psychology*

*Cognitive Research: Principles and Implications*

*Cognitive Science*

*CogSci*

CVPR

*Emotion*

EPIC

ECIS

EICS

*Eurohaptics*

*Frontiers in Human Neuroscience*

*Frontiers in Psychology*

*International Conference on Information Systems*

ACM *Interaction Design and Children*

*International Journal of Human Factors and Ergonomics*

*Journal of Cognitive Psychology*

*Journal of Comparative Psychology*

*Journal of Experimental Psychology: Human Perception and Performance*

*Journal of Experimental Psychology: Learning, Memory, and Cognition*

*Journal of Neurophysiology*

*Journal of the Optical Society of America A*

*Journal of Vision*

*Matters*

*Nature Communications*

*Nature Human Behaviour*

*NeurIPS (main track)*

*NeurIPS (datasets and benchmarks track)*

*New School Psychology Bulletin*

*NIME*

*NSF reviewer*

*PACIS*

*PLOS ONE (+ guest editor)*

*PLOS Computational Biology*

*Perception*

*Psychological Research*

*Psychological Review*

*Psychological Science*

*Psychonomic Bulletin & Review*

*Science Advances*

*SciPy*

*Visual Cognition*

*WITS*

*IEEE World Haptics Conference*

Member of the:

*Association for Information Systems,*
*Academy of Management,*
*INFORMS,*
*American Psychological Association,*
*Vision Sciences Society,*
*Cognitive Science Society,* and the
*Association for Computing Machinery.*

REFERENCES

Denis Pelli
*Professor,* New York University
6 Washington Place
New York, NY 10003
denis.pelli@nyu.edu

George Alvarez
*Professor,* Harvard University
33 Kirkland Street
Cambridge, MA 02138
alvarez@wjh.harvard.edu

Justin Jungé
*Senior Lecturer,* Princeton University
Peretsman-Scully Hall
Princeton, NJ 08540
jjunge@princeton.edu

Thomas Griffiths
*Professor,* Princeton University
Peretsman-Scully Hall
Princeton, NJ 08540
tomg@princeton.edu

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via http://suchow.io