Nori Jacoby: Curriculum Vitae

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EMPLOYMENT

Assistant Professor, Department of Psychology, Cornell University — From Fall 2024

Research Group Leader, Computational Auditory Perception — Oct. 1, 2018–Dec. 31, 2025
Max Planck Institute for Empirical Aesthetics, Frankfurt am Main

EDUCATION AND POSTDOCTORAL TRAINING

2016–2018:	Presidential Scholar in Society and Neuroscience, Columbia University
2016:	Postdoctoral Fellow, University of California Berkeley (PI: Tom Griffiths)
2014–2016:	Postdoctoral Fellow, Massachusetts Institute of Technology (PI: Josh McDermott)
2007–2014:	PhD in Computational Neuroscience, The Hebrew University of Jerusalem Supervisors: Naftali Tishby & Merav Ahissar
2001–2003:	MSc in Mathematics, The Hebrew University of Jerusalem Supervisor: Ruth Lawrence
1998–2000:	BSc in Mathematics and Physics, The Hebrew University of Jerusalem

OVERVIEW OF PUBLICATIONS

Total publications: **65**
Corresponding/senior authorships: **24**
First authorships: **17**
H-index (google scholar): **25**
i10 index (google scholar): **38**
Number of Citations (google scholar): **2238**

TEN HIGHLIGHTED PUBLICATIONS

**** indicates joint first authorship; † indicates joint last authorship***

1. **Jacoby, N**., R. Polak, J. Grahn, D. Cameron, K. M. Lee, R. Godoy, E. A. Undurraga, T. Huanca, T. Thalwitzer, N. Doumbia, D. Goldberg, E. Margulis, P. C. M. Wong, L. Jure, M. Rocamora, S. Fujii, P. E. Savage, J. Ajimi, R. Konno, S. Oishi, K. Jakubowski, A. Holzapfel, E. Mungan, E. Kaya, P. Rao, R. M. Ananthanarayana, S. Alladi, B. Tarr, M. Anglada-Tort, P. Harrison, M. J. McPherson, S. Dolan, A. Durango & J. H. McDermott. (2023). Cross-cultural commonalities and variation in mental representations of music revealed by a large-scale comparison of rhythm priors from around the world. Forthcoming, *Nature Human Behaviour*.

2. Tchernichovski, O., S. Frey, **N. Jacoby**†, D. Conley†. (2023). Incentivizing free riders improves collective intelligence in social dilemmas. Forthcoming, *Proceedings of the National Academy of Sciences. (PNAS)*

3. Marjieh, R.*, P. M. C. Harrison*, H. Lee, F. Deligiannaki & **N. Jacoby.** (2023). Reshaping musical consonance with timbral manipulations and massive online experiments. Forthcoming, *Nature Communications.*

4. Anglada-Tort, M., P. M. C. Harrison, H. Lee, & **N. Jacoby**. (2023). Large-scale iterated singing experiments reveal oral transmission mechanisms underlying music evolution. *Current Biology* 33.8, 1472-1486.e12.

5. Langlois, T. A., H. C. Zhao, E. Grant, I. Dasgupta, T. L. Griffiths & **N. Jacoby.** (2021). Passive attention in artificial neural networks predicts human visual selectivity. Oral presentation, *Proceedings of Advances in Neural Information Processing Systems (NeurIPS)* 34, 27094–27106.

6. Langlois, T. A.,* **N. Jacoby**,* J. Suchow & T. L. Griffiths (2021). Serial reproduction reveals the geometry of visuospatial representations. *Proceedings of the National Academy of Sciences* (*PNAS*) 118(13), e2012938118.
7. Roeske,* T. C., O. Tchernichovski,* D. Poeppel & **N. Jacoby** (2020). Categorical rhythms shared between songbirds and humans. *Current Biology* 30.18 3544–3555.e6.
8. Harrison, P. M. C., R. Marjieh, F. Adolfi, P. van Rijn, M. Anglada-Tort, O. Tchernichovski, P. Larrouy-Maestri & **N. Jacoby** (2020). Gibbs sampling with people. Oral presentation. *Proceedings of Advances in Neural Information Processing Systems (NeurIPS)* 33, 10659–10671.
9. **Jacoby, N.,** E. A. Undurraga, M. J. McPherson, J. Valdes, T. Ossandon & J. H. McDermott (2019). Universal and non-universal features of musical pitch perception revealed by sung reproduction. *Current Biology* 29, 1–15.
10. **Jacoby, N.** & J. H. McDermott (2017). Integer ratio priors on musical rhythm revealed cross-culturally by iterated reproduction. *Current Biology* 27.3, 359–370.

FULL PUBLICATION LIST (links and pdfs at norijacoby.com/pubs.html)

**** indicates joint first authorship; † indicates joint last authorship***

1. **Jacoby, N**., R. Polak, J. Grahn, D. Cameron, K. M. Lee, R. Godoy, E. A. Undurraga, T. Huanca, T. Thalwitzer, N. Doumbia, D. Goldberg, E. Margulis, P. C. M. Wong, L. Jure, M. Rocamora, S. Fujii, P. E. Savage, J. Ajimi, R. Konno, S. Oishi, K. Jakubowski, A. Holzapfel, E. Mungan, E. Kaya, P. Rao, R. M. Ananthanarayana, S. Alladi, B. Tarr, M. Anglada-Tort, P. Harrison, M. J. McPherson, S. Dolan, A. Durango & J. H. McDermott. (2023). Cross-cultural commonalities and variation in mental representations of music revealed by a large-scale comparison of rhythm priors from around the world. Forthcoming, *Nature Human Behaviour*.
2. Tchernichovski, O., S. Frey, **N. Jacoby**†, D. Conley†. (2023). Incentivizing free riders improves collective intelligence in social dilemmas. Accepted, *Proceedings of the National Academy of Sciences. (PNAS)*
3. Marjieh, R.*, P. M. C. Harrison*, H. Lee, F. Deligiannaki & **N. Jacoby**. (2023). Reshaping musical consonance with timbral manipulations and massive online experiments. Forthcoming, *Nature Communications.*
4. Nave, K., Carrillo, C., **Jacoby, N.**, Trainor, L., & Hannon, E. (2023). The Development of rhythmic categories as revealed through an iterative production task. Accepted, *Cognition*.
5. T. L. Griffiths, A. N. Sanborn, R. Marjieh, T. Langlois, Jing Xu, & **N. Jacoby**. (2023). Estimating subjective probability distributions. In T. L. Griffiths, N. Chater, & J. B. Tenenbaum (Eds.) *Bayesian Models of Cognition: Reverse-Engineering the Mind*. MIT Press. Forthcoming.
6. Sucholutsky, I., R. Battleday, K. Collins, R. Marjieh, J. C.Peterson, P. Singh, U. Bhatt, **N. Jacoby**, A. Weller, & T. L. Griffiths. (2023). On the informativeness of supervision signals. Uncertainty in Artificial Intelligence; *Proceedings of Machine Learning Research (PMLR*).
7. Marjieh, R., I. Sucholutsky, T. A. Langlois, **N. Jacoby,** & T. L. Griffiths. (2023). Analyzing diffusion as serial reproduction. arXiv:2209.14821. *The Fortieth International Conference on Machine Learning (ICML)*, 2023.
8. van Rijn, P., Y. Sun, H. Lee, R. Marjieh, I. Sucholutsky, F. Lanzarini, E. André, & **N. Jacoby**. (2023). Around the world in 60 words: A generative vocabulary test for online research. arXiv:2302.01614. *CogSci 2023*.
9. Marjieh, R., I. Sucholutsky, P. van Rijn, **N. Jacoby**, & T. L. Griffiths. (2023). What language reveals about perception: Distilling psychophysical knowledge from large language models. arXiv:2302.01308, *CogSci 2023.*

10. Anglada-Tort, M., P. M. C. Harrison, H. Lee, & **N. Jacoby**. (2023). Large-scale iterated singing experiments reveal oral transmission mechanisms underlying music evolution. *Current Biology* 33.8, 1472-1486.e12.

11. Singer, N., **N. Jacoby,** T. Hendler, & R. Granot. (2023). Feeling the beat: Temporal bredictability is associated with ongoing changes in music-induced pleasantness. *Journal of Cognition* 6.1, p.34. doi.org/10.5334/joc.286 2023.

12. Marjieh, R*., P. van Rijn*, I. Sucholutsky*, T. R. Sumers, H. Lee, T. L. Griffiths† & **N. Jacoby†**. (2023). Words are all you need? Capturing human sensory similarity with textual descriptors. *The Eleventh International Conference on Learning Representations* (ICLR), 2023. ArXiv: 2206.04105.

13. Kasten, K., **N. Jacoby**, & M. Ahissar. (2023). Poor synchronization yet adequate tempo-keeping in adults with autism. *Autism Research,* doi.org/10.1002/aur.2926

14. Gordon, R. L., D. Martschenko, S. Nayak, M. Niarchou, M. D. Morrison, E. Bell, **N. Jacoby** & L. Davis. (2023). Confronting ethical and social issues related to the genetics of musicality. *Annals of the New York Academy of Sciences*, https://doi.org/10.1111/nyas.14972.

15. Feld, S., **N. Jacoby,** D. Loughridge, P. Loui, & E. H. Margulis. Conversations with Steve Feld. (2023). In E. H. Margulis, D. Loughridge, & P. Loui (Eds.), *The Science-Music Borderlands: Reckoning with the Past, Imagining the Future,* pp. 367-383. MIT Press.

16. Savage, P.E., **N. Jacoby*,** E. H. Margulis*, H. Daikoku, M. Anglada-Tort, S. El-Sawan Castelo-Branco, F. Ewomazino Nweke, S. Fujii, S. Hegde, H. Chuan-Peng, J. Jabbour, C. Lew-Williams, D. Mangalagiu, R. McNamara, D. Müllensiefen, P. Opondo, A. D. Patel & H. Schippers. (2023). Building sustainable global collaborative networks: Recommendations from music studies and the social sciences. In E. H. Margulis, D. Loughridge, & P. Loui (Eds.), *The Science-Music Borderlands: Reckoning with the Past, Imagining the Future,* pp. 347-365. MIT Press.

17. Anglada-Tort, M., P. M. C. Harrison, & **N. Jacoby** (2022). Studying the effect of oral transmission on melodic structure using online iterated singing experiments. *Proceedings of the 44th Annual Conference of the Cognitive Science Society*, 810–818.

18. Marjieh, R.*, I. Sucholutsky*, T. R. Sumers, **N. Jacoby** & T. L. Griffiths (2022). Predicting human similarity judgments using large language models. *Proceedings of the 44th Annual Conference of the Cognitive Science Society*, 2598–2604.

19. van Rijn, P.*, H. Lee* & **N. Jacoby** (2022). Bridging the prosody GAP: Genetic Algorithm with People to efficiently sample emotional prosody. *Proceedings of the 44th Annual Conference of the Cognitive Science Society*, 2470–2476.

20. Siuzdak, H., P. Dura, P. van Rijn & **N. Jacoby** (2022). WavThruVec: Latent speech representation as intermediate features for neural speech synthesis. Proceedings of Interspeech. arXiv preprint arXiv:2203.16930.

21. van Rijn, P. S Mertes, D Schiller, P Dura, H Siuzdak, P Harrison, E André & **N. Jacoby** (2022). VoiceMe: Personalized voice generation in TTSP. Proceedings of Interspeech. arXiv:2203.15379.

22. Niarchou, M., D. E. Gustavson, J. Fah Sathirapongsasuti, M. Anglada-Tort, E. Eising, E. Bell, E. McArthur, P. Straub, The 23andMe Research Team, J. D. McAuley, J. A. Capra, F. Ullén, N. Creanza, M. A. Mosing, D. Hinds, L. K. Davis,† **N. Jacoby,†** & R. L. Gordon† (2022). Genome-wide association study of musical beat synchronization demonstrates high polygenicity. *Nature Human Behaviour* doi.org/10.1038/s41562-022-01359-x.

23. Jakubowski, K.*, R. Polak*, M. Rocamora, L. Jure & **N. Jacoby**. (2022). Aesthetics of musical timing: Culture and expertise affect preferences for isochrony but not synchrony. *Cognition* vol. 227. doi.org/10.1016/j.cognition.2022.105205.

24. Anglada-Tort, M., P. M. C. Harrison & **N. Jacoby** (2022). REPP: A robust cross-platform solution for online sensorimotor synchronization experiments. *Behavior Research Methods* doi.org/10.1101/2021.01.15.426897.

25. Vishne, G.*, **N. Jacoby***, T. Malinovitch, T. Epstein, O. Frenkel & M. Ahissar (2021). Slow update of internal representations impedes synchronization in autism. *Nature Communications 12:5439.*
26. Langlois, T. A., H. C. Zhao, E. Grant, I. Dasgupta, T. L. Griffiths & **N. Jacoby** (2021). Passive attention in artificial neural networks predicts human visual selectivity. Oral presentation, *Proceedings of Advances in Neural Information Processing Systems (NeurIPS)* 34, 27094–27106.
27. **Jacoby, N.*,** R. Polak* & J. London* (2021). Extreme precision in rhythmic interaction is enabled by role-optimized sensorimotor coupling: Analysis and modeling of West African drum ensemble music. *Philosophical Transactions B 201* 376(1835), p.20200331.
28. Langlois, T. A.,* **N. Jacoby**,* J. Suchow & T. L. Griffiths (2021). Serial reproduction reveals the geometry of visuospatial representations, *Proceedings of the National Academy of Sciences* (*PNAS*) 118(13), e2012938118.
29. Tchernichovski, O., S. Frey, **N. Jacoby** & D. Conley (2021). Experimenting with online governance. *Frontiers in Human Dynamics (Social Networks)* doi:10.3389/fhumd.2021.629285.
30. van Rijn, P., Mertes, S., Schiller, D., Harrison, P.M.C., Larrouy-Maestri, P., André, E., & **N. Jacoby**. (2021) Exploring Emotional Prototypes in a High Dimensional TTS Latent Space. Proc. Interspeech 2021, 3870-3874, doi: 10.21437/Interspeech.2021–1538
31. Lee, H., F. Höger, M. Schönwiesner, M. Park, & **N. Jacoby**. (2021). Cross-cultural mood perception in pop songs and its alignment with mood detection algorithms. Oral Presentation. Proceedings of the 22nd International Society for Music Information Retrieval Conference. arXiv: arxiv.org/abs/2108.00768.
32. Harrison, P. M. C., R. Marjieh, F. Adolfi, P. van Rijn, M. Anglada-Tort, O. Tchernichovski, P. Larrouy-Maestri & **N. Jacoby** (2020). Gibbs sampling with people. Oral presentation. *Proceedings of Advances in Neural Information Processing Systems (NeurIPS)* 33, 10659–10671.
33. Roeske,* T. C., O. Tchernichovski,* D. Poeppel & **N. Jacoby** (2020). Categorical rhythms shared between songbirds and humans. *Current Biology* 30.18 3544–3555.e6.
34. McPherson, M. J., S. E. Dolan, A. Durango, T. Ossandon, J. Valdes, E. A. Undurraga, **N. Jacoby**, R. A. Godoy & J. H. McDermott (2020). Perceptual fusion of musical notes by native Amazonians suggests universal representations of musical intervals. *Nature Communications* 11: 2786.
35. **Jacoby, N.,** E. A. Undurraga, M. J. McPherson, J. Valdes, T. Ossandon & J. H. McDermott (2019). Universal and non-universal features of musical pitch perception revealed by sung reproduction. *Current Biology* 29, 1–15.
36. Langlois, T., **N. Jacoby,** J. W. Suchow, & T. Griffiths. (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*, 2078–2083.
37. Mehr, S. A., M. Singh, D. Knox, D. M. Ketter, D. Pickens-Jones, S. Atwood, C. Lucas, A. Egner, **N. Jacoby,** E. J. Hopkins, R. M. Howard, S. Pinker, T. J. O'Donnell, M. M. Krasnow & L. Glowacki (2019). Universality and diversity in human song. *Science* vol. 366.6468, eaax0868
38. **Jacoby, N.,*** E. H. Margulis*, M. Clayton, E. Hannon, H. Honing, J. Iversen, T. R. Klein, S. A. Mehr, L. Pearson, I. Peretz, M. Perlman, R. Polak, A. Ravignani, P. E. Savage, G. Steingo, C. J. Stevens, L. Trainor, S. Trehub, M. Veal & M. Wald-Fuhrmann (2019). Cross-cultural work in music cognition: Challenges, insights and recommendations. *Music Perception* 37.3, 185–195.
39. Shany, O., N. Singer, B. P. Gold, **N. Jacoby, R.** Tarrasch, T. Hendler & R. Granot (2019). Surprise-related activation in the nucleus accumbens interacts with music-induced pleasantness. *Social Cognitive and Affective Neuroscience* 14.4, 459–470.
40. Polak, R.*, **N. Jacoby,*** T. Fischinger, D. Goldberg, A. Holzapfel & J. London (2018). Rhythmic prototypes across cultures. A comparative study of tapping synchronization. *Music Perception* 36.1: 1–23.

41. Elliott, M.T., D. Ward, R. Stables, D. Fraser, **N. Jacoby** & A. M. Wing (2018). Analysing multi-person timing in music and movement: Event based methods. *Timing and Time Perception: Procedures, Measures, and Applications* (Brill), 177–215.
42. **Jacoby, N.** & J. H. McDermott (2017). Integer ratio priors on musical rhythm revealed cross-culturally by iterated reproduction. *Current Biology* 27.3, 359-370
43. Langlois,* T. A., **N. Jacoby,*** J. Suchow & T. L. Griffiths (2017). Uncovering visual priors in spatial memory using serial reproduction. *Proceedings of the 39th Annual Meeting of the Cognitive Science Society,* G. Gunzelmann, A. Howes, T. Tenbrink, E. Davelaar, Eds., 712–717.
44. Mehta, A H., **N. Jacoby,** I. Yasin, A. J. Oxenham. & S. Shamma (2017). An auditory illusion reveals the role of streaming in the temporal misallocation of perceptual objects. *Philosophical Transactions* B 372: 1714. doi.org/10.1098/rstb.2016.0114.
45. Polak, R., **N. Jacoby** & J. London (2017). Afrikanistische Rhythmusforschung und die politische Dimension von Daten. Drei Analysen eines Mehrspur-Audio-Korpus von Percussion-Ensemblemusik aus Mali. *Zeitschrift der Gesellschaft für Musiktheorie*, 13.2.
46. Murton, O, L. Zipse, **N. Jacoby** & S. Shattuck-Hufnagel (2017). Repetition and a beat-based timing framework: What determines the duration of intervals between repetitions of a tapping pattern? *Timing and Time Perception* 5.3–4, 244–259.
47. Singer, N., **N. Jacoby,** T. Lin, G. Raz, L. Shpigelman, G. Gilam, R. Y. Granot & T. Hendler (2016). Common modulation of limbic network activation underlies the unfolding of musical emotions and its temporal attributes. *Neuroimage* 141, 517–29.
48. London, J., R. Polak & **N. Jacoby** (2016)**.** Rhythm histograms and musical meter: A corpus study of Malian percussion music. *Psychonomic Bulletin and Review* 24, 474–480.
49. Polak, R.*, **N. Jacoby*** & J. London (2016). Both isochronous and non-isochronous metrical subdivision afford precise and stable ensemble entrainment: A corpus study of Malian jembe drumming. *Frontiers in Auditory Neuroscience*. 10.3389/fnins.2016.00285.
50. Eloul, S., G. Zissu, Y. H. Amo & **N. Jacoby** (2016)**.** Motion tracking of a fish as a novel way to control electronic music performance. *Leonardo* 49.3, 203–10.
51. Honisch, J. J., M. E. Elliott, **N. Jacoby** & A. M. Wing (2016). Cue properties change timing strategies in group movement synchronization. *Scientific Reports* 6: 19439.
52. **Jacoby, N.** & M. Ahissar (2015). Assessing the applied benefits of perceptual training: Lessons from studies of working-memory training. *Journal of Vision* 15.6. 10.1167/15.10.6.
53. Jaffe-Dax, S., O. Raviv, **N. Jacoby,** Y. Loewenstein & M. Ahissar (2015). Towards a computational model of dyslexia. *The Journal of Neuroscience* 35: 12116–26.
54. **Jacoby, N.**, B. H. Repp, M. Ahissar, N. Tishby & P. Keller (2015). Parameter estimation of linear sensorimotor synchronization models: Phase correction, period correction and ensemble synchronization. *Timing & Time Perception* 10.1163/22134468–00002048.
55. **Jacoby, N.**, N. Tishby & D. Tymoczko (2015). Information bottleneck and functional harmony. *Journal of New Music Research*. 10.1080/09298215.2015.1036888.
56. **Jacoby, N.,** P. E. Keller, B. H. Repp, M. Ahissar & N. Tishby (2015). Lower bound on the accuracy of parameter estimation methods for linear sensorimotor synchronization models. *Timing & Time Perception.* 10.1163/22134468–00002047.
57. Van der Steen, M., **N. Jacoby,** M. T. Fairhurst & P. E. Keller (2015). Sensorimotor synchronization with tempo changing auditory sequences: Modeling temporal adaptation and anticipation. *Brain Research.* 10.1016/j.brainres.2015.01.053.
58. Lipkind, D., G. F. Marcus, D. K. Bemis, K. Sasahara, K., **N. Jacoby,** M. Takahasi, K. Suzuki, O. Feher, P. Ravbar, K. Okanoya & O. Tchernichovski (2013). Stepwise acquisition of vocal combinatorial capacity in songbirds and human infants. *Nature* 498, 104–8.

59. **Jacoby, N.** & M. Ahissar (2013). What does It take to Show that a Cognitive Training Procedure is Useful?: A Critical Evaluation. In *Progress in Brain Research: Changing Brains: Applying Brain Plasticity to Advance and Recover Human Ability*. M. Merzenich, M. Nahum & T. van Vleet, eds. Elsevier.
60. Gurion, T. & **N. Jacoby** (2013). Audio-only augmented reality system for social interaction. *HCI International 2013-Posters' Extended Abstracts*, 2013. 322–6.
61. **Jacoby, N.** & B. H. Repp (2012). A General linear framework for the comparison and evaluation of models of sensorimotor synchronization. *Biological Cybernetics* 106.3, 135–154.
62. Bohannon, P., N. Dalvi, Y. Filmus, **N. Jacoby**, S. Keerthi & A. Kirpal (2012). Automatic web-scale information extraction. *Proceedings of the 2012 ACM SIGMOD International Conference on Management of Data*, 609-612.
63. Repp, B. H., P. E. Keller & **N. Jacoby** (2011). Quantifying phase correction in sensorimotor synchronization: Empirical comparison of three paradigms. *Acta Psychologica* 139.2: 281–90.
64. Granot, R. Y. & **N. Jacoby** (2011). Musically puzzling II: Sensitivity to overall structure in a Haydn e-minor sonata? *Musica Scientiae* 16.1, 67–80.
65. Granot, R. Y. & **N. Jacoby** (2011). Musically puzzling I: Sensitivity to overall structure in sonata form? *Musica Scientiae* 15.3: 365–86.

GRANTS, FUNDING, AND AWARDS

2023: "Hearing4All" Collaborative Funding, Oldenburg University **(€36,500)**

2018–2025: Research Group Leader, Max Planck Institute for Empirical Aesthetics

- The award over five years includes my salary as well as funds for research and personnel; **€1,973,000** (extended and renewed till the end of 2025)

2019: Poudrier, Ève (PI); **Nori Jacoby,** Daniel Shanahan & George Tzanetakis (collaborators). "Modeling Polyrhythmic Experience." SSHRC Insight Grant, **CAD 253,964**

2019: Savage, Patrick (PI), **Nori Jacoby** & Elizabeth H. Margulis (collaborators). "Global Music Cognition Network." Japan Society for the Promotion of Science, **USD 200,000**

2014–2015: The ELSC Postdoctoral Fellowship for Studying Abroad **USD 45,000**

2012: Daniel Amit Memorial Prize in Computational Neuroscience, HUJI

2008: Margalit Prize for music for Ruti Kanner's play Go'al

2004: Israeli Defense Forces C^4I Prize for Significant Creative Research

2003: *Magna Cum Laude,* the Hebrew University of Jerusalem, for MSc.

2003: Israeli Defense Forces' Prize for Algorithmic Development

2000: *Magna Cum Laude*, the Hebrew University of Jerusalem, for BSc

INVITED TALKS

2023: *Keynote,* Around the world in 30 beats. Música Analítica Conference: Interdisciplinary Approaches to Musical Time, University of Coimbra, Portugal

2023 Integrating human decisions into computer algorithms using PsyNet. Towards Broader Adoption of Massive Online Experiments Roundtable, CogSci 2023, Sydney, Australia

2023: Integrating human decisions into computer algorithms. Networks and Cognition Workshop, Princeton University

2023 *Colloquium,* Integrating human decisions into computer algorithms. Glasgow University Friday Seminar Series

2021: *Keynote,* Universality and cross-cultural variation in mental representations of music revealed by global comparison of rhythm priors, SysMus Conference, Aarhus University, Denmark

2020: *Keynote,* Universality and cross-cultural variation in mental representations of music revealed by large-scale comparisons of rhythm priors. The 16th Annual McMaster Neuromusic Conference.

2019: Cross-cultural categorical perception without words: The case of musical rhythm. Rate and Rhythm in Speech Recognition (R3) Workshop, the MPI for Psycholinguistics, Nijmegen, Netherlands.

The cultural foundations of auditory processing. Presidential Scholars in Society and Neuroscience Symposium, Columbia University.

Mapping cross-cultural perceptual musical spaces. *Colloquium,* CLaME, New York University.

Categorical perception in rhythm. Music Department, Yale University.

2018: A global survey of rhythm representations. BRAMS, International Laboratory for Brain, Music and Sound Research, Montreal.

The world in 30 beats: A global survey of rhythm representations. *Colloquium*, Western University, Canada

Using iterated learning to reveal internal representations in audition and vision. Center for Theoretical Neuroscience at Columbia University.

Around the world in 30 beats. Neurohumanities Study Day, Longroom Hub, Trinity College Dublin.

Colloquium, Cross-cultural similarities and differences in musical pitch representations. CCS Colloquium/Perception Lunch (hosted by the Oxenham Lab), University of Minnesota.

Around the world in 30 beats: A lecture-demonstration. Rhythm Research Cluster Symposium: Exploring Musical Time Series Modeling Rhythmic Complexity, University of British Columbia.

2017: Computational music cognition in the field: Studying perceptual priors cross-culturally with iterated reproduction. Conference on the Origins of Music in Non-State Societies, Abbaye de Royaumont.

Music and neuroscience: Cross-cultural research. Workshop on Sound Studies, Columbia University and Paris Sciences et Lettres.

Perceptual priors revealed by iterated reproduction. Psychology Department *Colloquium*, Durham University.

What can rhythm tell us about cognition? Insights from iterated reproduction. *Colloquium,* Music Department, Columbia University.

2016: Integer ratio priors on musical rhythms. Invited talk, Cog Lunch Series, MIT.

Perceptual priors in music and speech revealed by iterated learning. Guest lecture, CCRMA, Stanford University.

Rhythmic perceptual priors revealed by iterated learning. Pandora, Oakland.

Perceptual priors in music and speech revealed by iterated learning. Starkey Hearing Research Center, Berkeley.

Parameter estimation of linear models. Workshop on Interpersonal Entrainment in Music Performance, Durham University.

Keynote, Iterated learning in musical rhythms. Bay Innovative Signal Hackers Bash, Dolby San Francisco.

Discovering rhythmic perceptual priors with iterated learning. *Colloquium*, the Music, Mind, and Society series at Vanderbilt University.

2014: Finger tapping, rhythm and working memory: the cognitive correlates of sensorimotor synchronization. ELSC Nervous Club, HUJI

Parameter estimation of sensorimotor synchronization models. University of Birmingham

Finger tapping, rhythm and working memory: the cognitive correlates of sensorimotor synchronization. MIT (Josh McDermott's Lab).

2013: Measuring multi-person timing: State of the art methods and analyses. Invited speaker, Pre-Conference Workshop, RPPW, University of Birmingham.

Information, categorization and prediction: A Mathematical metaphor for art music and perception? Guest lecture, the Electrical Engineering Systems Seminar Series, Tel-Aviv University.

Information, categorization and prediction: A Mathematical metaphor for art music and perception? Invited lecture at the Gonda Brain Research Center Weekly Seminar, Bar-Ilan University.

TEACHING EXPERIENCE

2018-present: Supervised postdocs, PhD and MA students, and BA interns, MPIEA

2019–2020: Co-convenor, Machine and Human Intelligence Seminar, MPIEA

2019: Organizer, Massive Online Experiments Intensive Course, MPIEA

2016–2018: Supervised various student interns, Columbia University

2009–2014: Lecturer, Music Technology Program, Bar-Ilan University

- Courses taught include Music Cognition, Max MSP, Audio Engineering, Arduino Robotics, Acoustics, Music and Math

2013, 2014: TA for Merav Ahissar, Hebrew University of Jerusalem

- Course: *Cognitive Processes*

2012: Instructor of record, Hebrew University of Jerusalem

- Course: *Music and the Brain*

2006–2008: Lecturer, the Naggar School for Music, Media and Photography

- Courses taught include: Improvisation, Ensemble

2000–2007: Captain in a research and development unit, the Israeli Defense Forces.

- Headed an academic research team, supervised over a dozen scientists doing classified work in machine learning and computer science.

POSTDOCS

Eline van Geert (Postdoctoral researcher; 6-month visit, 2023)

Manuel Anglada-Tort (Postdoctoral fellow with my research group, 2020–2022)

Peter Harrison (Postdoctoral fellow with my research group, 2019–2021)

Vani Rajendaran (Postdoctoral researcher; 3-month visit, 2021)

Thomas Langlois (joint postdoctoral fellow, Princeton University and my research group, 2019–2020)

PHD STUDENTS

Harin Lee (PhD student in Neurobiology, MPI for Human Cognitive and Brain Sciences, Leipzig, 2022–)

Pol van Rijn (PhD student, Neuroscience Dept., MPIEA, 2022–)

Maria Zimmermann (DAAD Exchange Student, Jagiellonian University, 2020)

MA STUDENTS

Erika Tsumaya (Masters student in cognitive neuroscience at Marburg Universität, 2022–)

Kevin Nguyen (Masters student in cognitive science, Technische Universität Darmstadt, 2023–)

Jakob Niedermann (Masters student in Neuro- and Behavioral Science Universität Leipzig, 2022–)

Dima Minishin (Master's student, Bar-Ilan University)

Tom Gurion (Master's student, Bar-Ilan University)

OTHER MENTORSHIP

Raja Marjieh (Research Group lab manager, 2019–2021)

Dun-Ming (Brandon) Huang (visiting student, UC Berkeley, 2023

Hamed Fard (intern, MA student at the Technical University Berlin, 2021)

Fotini Deligiannaki (BA Erasmus Exchange Student, National Technical University of Athens, 2021)

Luke Poeppel (BA, NYU and MPI for Empirical Aesthetics, 2021–2022)

PLACEMENT

Peter Harrison, Lecturer in Music and Science at Cambridge University

Manuel Anglada-Tort, Lecturer in Psychology at Goldsmiths University of London

Thomas Langlois, Postdoctoral fellow, the Center for Perceptual Systems, UT Austin (Wei Lab)

Raja Marjieh, PhD student in Psychology at Princeton University

CONTRIBUTIONS TO DIVERSITY

2021: Co-convenor, with Lisa Margulis and Pat Savage, international symposium on "Building Sustainable Global Collaborative Research Networks" (virtual), hosted by the Center for Language, Music, and Emotion, NYU

- Resulted in a joint first author position piece entitled "Building sustainable global collaborative networks: Recommendations from music studies and the social sciences" (see Publications).

2018: Co-convenor, with Lisa Margulis and Pat Savage, international symposium on "Cross-Cultural Research in Music Cognition: Methodologies, Pitfalls, and Practices," Max Planck Institute for Empirical Aesthetics, Frankfurt

- Resulted in a first-author position piece on the topic of "Cross-cultural work in music cognition: Challenges, insights and recommendations" (see Publications).

REFERENCES

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