

GAL RAZ

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EMPLOYMENT

- 2024- Project Manager (Financial Services), Gelephu Mindfulness City
- 2024- Visiting Research Scientist (part-time), Massachusetts Institute of Technology
- 2024- Visiting Researcher (part-time), Chiba Institute of Technology
- 2018-2019 Visiting Researcher, Hitachi Centre for Exploratory Research
- 2018 Management Consulting Intern, Oliver Wyman (Amsterdam Office)

EDUCATION

- 2024 **PhD** in Brain & Cognitive Sciences, MIT
- 2018 **MSc** in Psychological Research, University of Oxford
- 2016 **BSc** (Hons.) in Liberal Arts and Sciences, University College Utrecht

AWARDS

- 2022-2024 ICoN Graduate Fellowship
- 2022 Best Computational Paper at Cognitive Science Society Conference (joint with Anjie Cao)
- 2021 Walle Nauta Award for Excellence in Undergraduate Teaching
- 2020 Cheng Graduate Fellowship
- 2018 Humphrey Prize for Best Research Project Dissertation in MSc cohort
- 2018 Best Research Project Poster Presentation Prize in MSc cohort
- 2017 Full scholarship for MSc studies by German Academic Exchange Services
- 2016 Kupcinet-Getz Scholar at Weizmann Institute of Science

PUBLICATIONS AND TALKS

Under review

Raz, G., Piccolo, S., Medrano, J., Liu, S., Lydic, K., Mei, C., Nguyen, V., Shu, T. & Saxe, R. (under review). An asynchronous, automated workflow for looking time experiments with infants.

Sheffield, J. G., **Raz, G.**, Sella, F., & Kadosh, R. C. How can noise alter neurophysiology in order to improve human behaviour? A combined transcranial random noise stimulation and electroencephalography study (preprint available [here](#))

Publications

Raz, G., Cao, A., Saxe, R., & Frank, M.C. (2023). Modeling habituation in infants and adults using rational curiosity over perceptual embeddings. *NeurIPS* (IMOL Workshop)

Liu, S., **Raz, G.**, Kamps, F., Grossmann, T. & Saxe, R. (2023). Response: No evidence for discontinuity between infants and adults. *Trends in Cognitive Sciences*

Raz, G., Cao, A., Frank, M. C. & Saxe, R. (2023). No evidence for familiarity preferences after partial exposure to visual concepts in preschoolers and infants. *Proceedings of the Annual Meeting of the Cognitive Science Society*

Erel, Y., Shannon, K.A., ..., **Raz, G.**, ... & Liu, S. (2023). iCatcher+: Robust and automated annotation of infant gaze from videos collected in the lab and online. *Advances in Methods and Practices in Psychological Science*

Cao, A., **Raz, G.**, Saxe, R. & Frank, M. C. (2022). Habituation reflects optimal exploration over noisy perceptual samples. *Topics in Cognitive Science*

Sella, F., **Raz, G.** & Cohen-Kadosh, R. (2021). When randomisation is not good enough: Matching groups in intervention studies. *Psychonomic Bulletin & Review*, 1-9.

Saban, W., **Raz, G.**, Grabner, R., Gabay, S. & Cohen-Kadosh, R. (2021). Primitive Visual Channels Have a Causal Role in Cognitive Transfer. *Scientific Reports*, 11(1), 1-9.

Raz, G. & Saxe, R. (2020). Learning in Infancy Is Active, Endogenously Motivated, and Depends on the Prefrontal Cortices. *Annual Review of Developmental Psychology*, 2, 247-268..

Poster presentations

Raz, G., Cao, A., Frank, M. C., Saxe, R., Rational analysis of infant looking time (*International Congress of Infant Studies*, 2022)

Cao, A., **Raz, G.**, Saxe, R., Frank, M. C. Habituation reflects optimal exploration over noisy perceptual samples (*The Multi-disciplinary Conference on Reinforcement Learning and Decision Making*, 2022)

Raz, G.*, Radkani, S.*, Tenenbaum, J. B. & Saxe, R. Humans measure algorithmic complexity to guide engagement with event sequences (*Annual Meeting of the Cognitive Science Society*, 2020, *equal contribution)

Dissertations

2018 **MSc Dissertation:** Modulating Arithmetic Learning with Transcranial Random Noise Stimulation (University of Oxford)

2016 **BSc Dissertation:** Biases in Visual Number Perception: Computational Models of Early Visual Processing Predict Numerosity Judgments (University College Utrecht)

TEACHING AND MENTORSHIP

Courses

2020 & 2021 Head TA for Infant and Early Childhood Cognition (taught by Prof. Laura Schulz)

Mentored students

Undergrads Miranda Zhang ('17-'18, Oxford), Amy Small ('17-'18, Oxford), Ashti Shah ('19, MIT), Anna Wilson ('20-'21, MIT), Christian Rich ('20-'21, MIT), Andrea Moncada ('21-'22, MIT), Ronald Alvarez ('22, MIT)

Qualifications

Fall 2021 Inclusive Teaching Track, MIT Teaching + Learning Lab

Spring 2021 Microteaching Track, MIT Teaching + Learning Lab

Winter 2020 Lesson Planning Track, MIT Teaching + Learning Lab

Fall 2020 Subject Design Track, MIT Teaching + Learning Lab

COMMUNITY SERVICE AND OUTREACH

- 2020 - present Member of Graduate Student Council of School of Science, MIT
- Advising the Dean's office on graduate student affairs
- 2020 - present REFS (Resource for Easing Friction and Stress) in Brain & Cognitive Sciences, MIT
- Confidential resource and advocate for graduate students
- Working with departmental leadership to further students' interests: successfully pushed through relocation stipend for incoming graduates, and a policy for PhD internships.
- 2017 - present Volunteer at Dhamma Meditation Centers
- Regular volunteer at 10-day silent meditation retreats
- Served in German, Israeli, UK and US centers
- Working in kitchen, maintenance and course management

MISCELLANEOUS SKILLS AND INTERESTS

Programming languages (in order of proficiency): Python, R, Stan, MATLAB, JavaScript, Unity scripting (C#), WebPPL

Lab techniques: infant behavioral experiments, adult online & in-lab experiments, adult eye-tracking, electroencephalography (EEG), functional near-infrared spectroscopy (fNIRS), transcranial electrical brain stimulation, rodent behavioral experiments

Languages: German, English and Hebrew (fluent), Spanish (level B2), Dutch (level B1)

Online courses (click course names for certificates):

Machine Learning (Stanford)	Bayesian Statistics I (UC Santa Cruz)
Computational Neuroscience (UW)	Bayesian Statistics II (UC Santa Cruz)
MATLAB Programming (Vanderbilt)	Python for Data Science and ML (Udemy)

For fun: Vipassana meditation, Judo, Yoga, chess, poker, RTS games, electronic music