

# Matan Mazor

## Curriculum Vitae

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### EDUCATION

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|--------------|---|
| 2017 to 2021 | <b>Institute of Neurology, UCL</b><br>PhD. Advisors: Prof. Stephen M. Fleming and Prof. Karl J. Friston<br>Thesis title: "SELF-MODELLING IN INFERENCE ABOUT ABSENCE"  |
| 2019         | <b>Department of Brain and Cognitive Sciences, MIT</b><br>A four-month research visit to the labs of Prof. Laura Schulz and Prof. Josh Tenenbaum, studying intuitive models of psychophysics.   |
| 2014 to 2016 | <b>Sagol School of Neuroscience, Tel Aviv University</b><br>MSc, <i>Summa Cum Laude</i> . Advisor: Prof. Roy Mukamel<br>Thesis title:<br>"THE INTERNAL FORWARD MODEL IN THE HUMAN BRAIN: A FUNCTIONAL MRI STUDY"<br>Cumulative GPA: 98.4/100<br>Final examination: 100/100<br>Thesis dissertation: 98/100 |
| 2011 to 2015 | <b>Adi Lautman Interdisciplinary Program for Outstanding Students, Tel Aviv University</b><br>Cumulative GPA: 92/100  |
| 2009 to 2011 | <b>Bezalel Academy for Art and Design, Jerusalem</b><br>Visual Communication, Illustration major  |

### HONORS & AWARDS

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| 2022             | <b>Research Innovation Grant (£4,832)</b><br><b>The Development and Stability of Metacognitive Knowledge</b><br>Birkbeck, University of London |
| 2019             | <b>Bogue Fellowship (£6,624)</b><br><b>Inference about Absence</b><br>University College London  |
| 2017, 2018, 2019 | <b>Kenneth Lindsay Scholarship (£3,000)</b><br>Anglo Israel Association  |
| 2018             | <b>Guarantors of Brain Travel Grant (£1,000)</b>   |
| 2017 to 2020     | <b>Graduate Research Scholarship (GRS)</b><br>Institute of Neurology, University College London  |
| 2017 to 2020     | <b>Overseas Research Scholarship (ORS)</b><br>Institute of Neurology, University College London  |
| 2016             | <b>Travel Grant</b>  |

Sagol School of Neuroscience, Tel Aviv University

- 2015 **Best Talk Award**  
Sagol School of Neuroscience , Tel Aviv University
- 2013 **Award for Exceptional Academic Achievements**  
Adi Lautman Interdisciplinary Program for Outstanding Students, Tel Aviv University
- 2011 to 2014 **Full Excellence Scholarship**  
Adi Lautman Interdisciplinary Program for Outstanding Students, Tel Aviv University

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## ACADEMIC & PROFESSIONAL EXPERIENCE

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- 2022 to present **Postdoctoral researcher**  
*Action and Perception lab, Birkbeck, University of London*
- 2016 to 2017 **Research Staff**  
*Roy Mukamel's lab, Tel Aviv University*
- 2012 to 2014 **Research Assistant**  
*Naama Friedmann's lab, Tel Aviv University*
- 2012 to 2014 **Research intern**  
*Linguistic infrastructure team, Ginger Software (Intel since 2014)*

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## TEACHING EXPERIENCE

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- 2020 to 2021 **BSc Research supervisor**  
*Fleming lab, University College London*  
Supervised two final-year psychology students.
- 2019 to 2020 **MSc research supervisor**  
*Fleming lab, University College London*  
Supervised Chudi Gong's MSc research project.
- 2018 to 2019 **MSc research supervisor**  
*Fleming lab, University College London*  
Supervised Roy Tal's MSc research project, for which has been awarded the 2019 Richard Frackowiak MSc Prize.
- 2017 **Lecturer: “Introduction to Bayesian Statistics” graduate course**  
*Tel Aviv University*
- 2017 **Lecturer: “Methods in MRI/fMRI” graduate course**  
*Tel Aviv University*
- 2016 **Teaching Assistant: “Introduction to Computational Neuroscience”**  
*Tel Aviv University*
- 2016 **Bayesian Statistics Workshop Instructor**  
*Tel Aviv University*
- 2014 to 2015 **Educational Consultant**  
*Ort educational network of schools and colleges*

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## SERVICE

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| 2022 | <b>Tutorial host</b><br><i>The annual meeting of The Association for the Scientific Study of Consciousness</i><br><i>Amsterdam, the Netherlands</i><br>Co-hosted a tutorial about “the ethics of animal consciousness”, together with Timo Stein.  |
| 2021 | <b>Programme Committee Member</b><br><i>NeurIPS 2021</i><br>“Metacognition in the age of AI” workshop  |
| 2020 | <b>Journal club organizer and host</b><br><i>Institute of Neuroscience, University College London</i><br><br><b>Ad Hoc Reviewer</b><br><i>Cognition, eLife, Cognitive Science. Attention, Perception and Psychophysics, Philosophical Psychology, Developmental Psychology “Philosophy and the Mind Sciences”.</i> |

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## PUBLICATIONS & PRESENTATIONS

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- Mazor**, Gong & Fleming ([bioRxiv](#), under review)  
*Re-evaluating frontopolar and temporoparietal contributions to detection and discrimination confidence*
- Mazor**, Siegel & Tenenbaum ([GitHub](#), under review)  
*Internal models of visual search are rich, person-specific, and mostly accurate*
- Mazor** ([PsyArXiv](#), under review)  
*Inference about absence as a window into the mental self-model*
- Mazor**, Brown, Ciaunica, Demertzi, Fahrenfort, Faivre, Francken, Lamy, Leggenhager, Moutoussis, Nizzi, Salomon, Soto, Stein & Lubianiker ([Perspectives on Psychological Science](#), 2022)  
*The scientific study of consciousness cannot, and should not, be morally neutral*
- Mazor\***, Dijkstra\* & Fleming ([Journal of Neuroscience](#), 2022)  
*Dissociating the neural correlates of subjective visibility from those of decision confidence*
- Mazor** & Fleming ([Journal of Experimental Psychology: General](#), 2022)  
*Efficient search termination without task experience*
- Mazor**, Moran & Fleming ([Neuroscience of Consciousness](#), phase 1 Registered Report; 2021  
[Neuroscience of Consciousness](#), phase 2 Registered Report; 2021)  
*Metacognitive asymmetries in visual perception*
- Dijkstra, **Mazor**, Kok & Fleming ([Cognition](#), 2021)  
*Mistaking imagination for reality: Congruent mental imagery leads to more liberal perceptual detection*
- Mazor** & Fleming ([Nature Human Behaviour](#), 2021)  
*The Dunning-Kruger effect revisited*
- Mazor** & Fleming ([Philosophy and the Mind Sciences](#), 2020)  
*Distinguishing absence of awareness from awareness of absence*
- Mazor**, Friston & Fleming ([eLife](#), 2020)  
*Distinct neural contributions to metacognition for detecting, but not discriminating visual stimuli*
- Scotti, Kulkarni, **Mazor**, Klapwijk, Yarkoni & Huth ([Journal of Open Source Education](#), 2020)  
*EduCortex: browser-based 3D brain visualization of fMRI meta-analysis maps*
- Mazor**, Mazor & Mukamel ([European Journal of Neuroscience](#), 2019)  
*A novel tool for time-locking study plans to results*

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**Mazor**, Firestone & Phillips (July, 2022; talk)  
*Using pretense behavior to explore counterfactual self-simulation*  
The annual meeting of The Cognitive Science Society  
Toronto, Canada

**Mazor** (June, 2022; invited symposium talk)  
*Simulating counterfactual cognitive states*  
The annual meeting of The Society for Philosophy and Psychology  
Milan, Italy

**Mazor**, Goetz & Press (June, 2022; poster)  
*Loss-gain asymmetries in perceptual decisions*  
The annual meeting of The Association for the Scientific Study of Consciousness  
Amsterdam, the Netherlands

**Mazor**, Goldreich & Press (June, 2022; poster)  
*Presence-absence asymmetries in predictive perception*  
The annual meeting of The Association for the Scientific Study of Consciousness  
Amsterdam, the Netherlands

**Mazor\***, Yaron\*, Faivre & Mudrik (June, 2022; poster)  
*Telling between strong and weak null results using non-directional tests*  
The annual meeting of The Association for the Scientific Study of Consciousness  
Amsterdam, the Netherlands

**Mazor**, Phillips & Firestone (June, 2022; poster)  
*Pretending not to see: Pretense behavior reveals the limits of self-simulation*  
The annual meeting of the Visual Sciences Society

**Mazor**, Eberhardt, Risoli & Fleming (July, 2021; talk)  
*Dimensions of moral worth*  
The annual meeting of The Cognitive Science Society

**Mazor** (June, 2021; talk)  
*Why do some scientists say they study consciousness*  
The annual meeting of the Association for the Scientific Study of Consciousness

**Mazor** (June, 2021; talk)  
*Zero-shot search termination reveals a dissociation between implicit and explicit metacognitive knowledge*  
The annual meeting of the Association for the Scientific Study of Consciousness

**Mazor**, Eberhardt, Risoli & Fleming (June, 2021; talk)  
*Perceptual consciousness and moral worth are strongly coupled*  
The annual meeting of the Association for the Scientific Study of Consciousness

**Mazor** & Fleming (October, 2020; talk)  
*Metacognitive contributions to search termination*  
Neuromatch3

**Mazor** & Fleming (June, 2019; talk)  
*Inference about absence*  
The annual meeting of the Association for the Scientific Study of Consciousness  
Ontario, Canada

**Mazor**, Friston, Charles & Fleming (May, 2019; poster)  
*Inference about absence: the special status of no responses.*  
The annual meeting of the Visual Sciences Society  
Florida, USA

**Mazor**, Mazor & Mukamel (June, 2018; poster)

*In-lab pre-registration: time-locking of study plans and hypotheses without preliminary review*

The annual meeting of the Organization for Human Brain Mapping

Singapore

**Mazor**, Fahrenfort & Fleming (June, 2018; poster)

*Failure to incorporate information about perceptual precision impairs metacognitive sensitivity in detection*

The annual meeting of the Association for the Scientific Study of Consciousness

Krakow, Poland

**Mazor** & Mukamel (February, 2017; poster)

*TWISTER: a temporal multivariate approach to behavioural and neuroimaging studies*

The annual meeting of the Israeli Society for Cognitive Psychology

Acre, Israel

**Mazor** & Mukamel (June, 2016; poster)

*Time-Course Consistency (TCC): an alternative to model-based approaches to fMRI analysis*

The annual meeting of the Organization for Human Brain Mapping

Geneve, Switzerland

**Mazor** & Mukamel (June, 2016; poster)

*Time Course Consistency: A model-free approach to fMRI analysis*

The international workshop on Pattern Recognition in Neuroimaging

Trento, Italy

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## RELATED VOLUNTEER WORK

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|              |   |
|--------------|---|
| 2022         | <b>The Under-Represented Student Mentorship (URSM) scheme</b><br>Mentoring students in their applications for neuroscience PhD. programmes. |
| 2021         | <b>240 Project</b><br>Drawing and painting with people who are affected by homelessness and exclusion.                                      |
| 2020 to 2021 | <b>Maccabi Healthcare Services</b><br>Keeping virtual company to an older person who is living by himself in self-isolation.                |
| 2012 to 2016 | <b>Abarbanel Mental Health Center</b><br>Worked in a closed psychiatric ward, primarily with patients coping with schizophrenia.            |
| 2014         | <b>Drawing instructor at Levinsky Garden Library</b><br>Taught basics of drawing from observation to refugees from Eritrea and Sudan.       |
| 2013         | <b>Keshet - Association for the Elderly in Tel-Aviv-Yaffo</b><br>Weekly friendly meetings with a cerebellar stroke patient                  |
| 2007 to 2008 | <b>Melabev day-care for people with Dementia and Alzheimer's disease</b>  |

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## SKILLS & INTERESTS

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| Programming | <b>Python</b> (scipy, pandas, scikit-learn, psychopy), <b>R</b> (dplyr, brms, rjags, RStan, Shiny, PapaJa), <b>JavaScript</b> (p5, jsPsych, jQuery, D3), <b>MATLAB</b> (Psychtoolbox, SPM, RSA), <b>Git</b> |
| OS          | Linux, Windows  |
| Languages   | <b>Hebrew</b> (native language), <b>English</b> (proficient), <b>Italian</b> (independent user), <b>Arabic</b> (student)  |
| Interests   | cognitive sciences, statistical inference, philosophy of mind, moral philosophy, open science   |

## SELECTED REVIEWS FROM MY ONLINE PARTICIPANTS

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“This experiment was very enjoyable” (Prolific ID: 5f649be46e4ea202219bc735) \* “it was a solid experiment” (Prolific ID: 5d62886927a84f00010fbbb4) \* “I enjoyed the game very much” (Prolific ID: 5f78433aef37d001ace1f086) \* “Very well explained and set up.” (Prolific ID: 5ea1c935df1e160ae8532b18) \* found it incredibly easy“ (Prolific ID: 5e459f61418f610891628564) \* ”All is good - simple, easy to understand and enjoyable too.“ (Prolific ID: 5ae1c385b0d05100015d0978) \* ”interesting experiment, which could be expanded in complexity through use of different shapes and colours.“ (Prolific ID: 5f3bd56999a44d9324b76ddb) \* ” “This was actually one of the more enjoyable experiments I’ve taken part of on Prolific.” (Prolific ID: 5fb18ebed0a22f688e3377b8) \* “This experiment was very enjoyable” (Prolific ID: 5f649be46e4ea202219bc735) \* “An interesting and unique approach to a survey. Enjoyed it.” (Prolific ID: 5fd0ed3ee993330172b0b97a) \* “”This was actually one of the more enjoyable experiments I’ve taken part of on Prolific.“ (Prolific ID: 5fb18ebed0a22f688e3377b8) \* ”This was the most fun online research game I’ve ever played. Kudos!“ (Prolific ID: 62a779f845a7840040d41bf8) \* ”it was testing reaction time I guess“ (Prolific ID: 5ee0edcb962eba464f486b40) \* ”I thought this was fun and got me thinking about things.“ (Prolific ID: 5f7a28b8bedcf2112ebd1289) \* ”Jesus loves you!“ (Prolific ID: 5a135875074b1900012527a9)