# MICHELE DEODATO

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MicheleDeodato DeoMiche

## RESEARCH

Brain Oscillations
Perception | Emotions
Individual Differences

## METHODS

M/EEG | Psychophysics
Machine Learning
Eye-Tracking

## CODING

Matlab | Python
JavaScript | HTML

## LANGUAGES

**Italian:** Native

**English:** Fluent

**French:** Basic

## SOFT SKILLS

Initiative | Critical Thinking
Communication
Problem-Solving

## EXPERIENCE

### Research Assistant | New York University Abu Dhabi

2020 – Now — Abu Dhabi, United Arab Emirates

- Conceptualization and communication of scientific experiments. EEG, Eye-tracking and behavioural data analyses. Implementation of psychophysics methods and web-based experiments.

### Research Project | University of Geneva

2019 — Geneva, Switzerland

- I developed an EEG study to investigate markers of alertness and neuroticism by means of topographic and time-frequency EEG analyses.

### Eye-tracking Assistant | Ophthalmic Hospital Sperino

2018 — Turin, Italy

- Acquisition and analysis of eye-tracking data. I Implemented a Matlab toolbox to detect oculomotor events and carry out common analyses on raw data.

## WORKSHOPS

### Brain Imaging Workshop | New York University Abu Dhabi

2023 — Abu Dhabi, UAE

- Basic and more advanced concepts of MRI analysis in the context of brain structure and function.

### Advanced MEG/EEG toolkit | Donders Institute

2022 — Nijmegen, Netherlands

- Advanced MEG and EEG data analysis using Matlab and Fieldtrip, including pre-processing, frequency analysis, source reconstruction and statistical methods.

### Linear Algebra for Neuroscientist | Radboud University

2019 — Nijmegen, Netherlands

- Applied linear algebra in multichannel neuroscience datasets, including time-frequency analyses, source-separation and eigendecomposition.

## EDUCATION

### Erasmus Exchange Program | University of Geneva

2019 — Geneva, Switzerland

- I attained a scholarship to attend Neuroimaging courses (fMRI, EEG) offered by the university of Geneva and the Lemanic Neuroscience Doctoral School and gain experience in neuroscience research.

### Master in Cognitive Neuroscience | University of Turin

2017 – 2019 Turin, Italy

- Interdepartmental master on modern scientific psychology and recent results in the field of cognitive neuroscience. I also included in my career plan courses regarding Data Analysis, Artificial Intelligence and Deep Learning.
- Dissertation: research project on the spatio-temporal dynamics of resting state EEG.
- Final grade: 110/110 cum laude and honorable mention.

### Bachelor in Psychology | University of Catania

2014 – 2016 Catania, Italy

- I developed a critical understanding of the processes underlying human thinking, emotions, social dynamics and psychopathology.
- Dissertation: 15.000-word investigation on the benefits of complex systems epistemological approach to neuroscience and psychological science.
- Final grade: 108/110

## PUBLICATIONS

- Melcher, D., Alaberkyan A., Anastasaki C., Liu X., **Deodato, M.**, Marsicano G., & Almeida D. (2024). A valid parafoveal preview influences fixation-related potentials for English words. (under review)
- **Deodato, M.**, Ronconi L., & Melcher, D. (2024). Schizotypal traits and anomalous perceptual experiences are associated with greater visual temporal acuity. (under review)
- **Deodato, M.**, & Melcher, D. (2023). Aperiodic EEG predicts variability of visual temporal processing. biorkiv
- **Deodato, M.**, Seeber M., Mammeri K., Michel C.M., Vuilleumier P. (2023). Combined effects of neuroticism and negative emotional context on spontaneous EEG dynamics at rest (accepted in Social Cognitive Affective Neuroscience)
- Fabius, J. H., Fracasso, A., **Deodato, M.**, Melcher, D., & Van der Stigchel, S. (2023). Bilateral increase in MEG planar gradients prior to saccade onset. Scientific reports, 13(1), 5830.
- **Deodato, M.**, & Melcher, D. (2023). Correlations between visual temporal resolution and individual alpha peak frequency: Evidence that internal and measurement noise drive null findings. Journal of Cognitive Neuroscience, 1-12.
- **Deodato, M.**, & Melcher, D. (2022). The effect of perceptual history on the interpretation of causality. Journal of vision, 22(11), 13-13.

## CONFERENCES AND ABSTRACTS

- **Deodato, M.**, & Melcher, D. (European Conference on Visual Perception 2023). Seeing double… in time: single light pulses are seen as two separate flashes.
- **Deodato, M.**, & Melcher, D. (Timing Research Forum 2023). EEG correlates of visual temporal integration/segregation.
- **Deodato, M.**, & Melcher, D. (Vision Science Society 2023). Aperiodic and Periodic EEG predict performance in a double-flash fusion task.
- Lapomarda G., Melcher, D., & **Deodato, M.** (Vision Science Society 2023). Seeing fast and slow: systematic state and trait variations in visual temporal acuity.
- **Deodato, M.**, & Melcher, D. (Vision Science Society 2022). Serial Dependence in Visual Causality.
- **Deodato, M.**, & Melcher, D. (European Conference on Visual Perception 2021). Schizotypal traits and anomalous perceptual experiences are associated with increased temporal resolution of visual perception in a two-flash fusion task.