Zsuzsanna **Nemecz**

Address
Lützelsteiner Weg 30
14195 Berlin
Germany

Contact
+36 30 4653691
nemecz.zsuzsanna@ttk.hu

Find me here
Website
GitHub
X (Twitter)

Language skills
English (advanced)
German (upper intermediate)
Hungarian (native speaker)

Programming languages
Python, R, C,
Shell Scripting, Matlab

Technical skills
FSL, FreeSurfer, ASHS, ANTS
MNE Python

Strengths
Endless curiosity
Quick learner
Good collaborator
Ability to work independently

Education

2019–Ongoing **PhD in Cognitive Psychology**
Supervisor: Dr. Attila Keresztes
Eötvös Loránd University, Budapest

2017 **Embedded Software Developer**
Green Fox Academy, Budapest

2013–2016 **Mind and Brain M.Sc.**
Humboldt-Universität zu Berlin

2009–2013 **Psychology B.A.**
Eötvös Loránd University, Budapest

Conference Presentations

2024 **Mind Brain Body Symposium - MBB** Berlin, Germany
Short Talk
Resolving Memory Interference Between Non-Meaningful Stimuli Depends on the Parahippocampal and Perirhinal Cortex, Not the Hippocampus

2023 **Cognitive Neuroscience Society - CNS** San Francisco, United States
Poster Presentation
Longitudinal Investigation of Medial Temporal Lobe Pathways And Mnemonic Discrimination in Aging

2022 **Federation of European Neuroscience Societies - FENS** Paris, France
Poster Presentation
Discriminating Memories of Items and Spatial Locations:
Is there Content-Specific Mnemonic Specialization in the Human Medial Temporal Lobe?

2021 **Cognitive Neuroscience Society - CNS** Online
Poster Presentation
A Strong Test of Content-Specific Pattern Separation via Distinct Medial Temporal Pathways

Publications

Bencze, D., Marián, M., Szőllősi, Á., Pajkossy, P., **Nemecz, Z.**, Keresztes, K., Hermann, P., Vidnyánszky, Z., & Racsmány, M. (2024). Contribution of the lateral occipital and parahippocampal cortices to pattern separation of objects and contexts. Manuscript submitted for publication.

Keresztes, A., Bankó, É., Báthori, N., Tomacsek, V., Varga, V. A., Nárai, Á., **Nemecz, Z.**, Dénes, Á., Gál, V., Hermann, P., Simor, P., & Vidnyánszky, Z. (2023). Multi-night EEG reveals positive association between sleep efficiency and hippocampal subfield volumes in healthy aging. bioRxiv. https://doi.org/10.1101/2023.11.05.565729

Nárai, Á.*, **Nemecz, Z*.**, Vidnyánszky, Z., & Weiss, B. (2022). Lateralization of orthographic processing in fixed-gaze and natural reading conditions. Cortex, 157, 99–116.
https://doi.org/10.1016/j.cortex.2022.07.017
*Equal contributions.

Scholarships and Grants

2023–2024 **One-year Research Grant for Graduate Students**
German Academic Exchange Service - DAAD

2022–2023 **ÚNKP-22-3 New National Excellence Program**
Hungarian Ministry for Culture and Innovation

2022, 2023 **Travel Grant for Conference Attendance**
Talent Support Council, Eötvös Loránd University

2021 **"Doctoral Projects" Research Consortium** Jointly with fellow PhD student Alex Ilyés
Faculty of Psychology, Eötvös Loránd University

2019–2023 **Hungarian State Scholarship for Doctoral Students**
Hungarian Scholarship Board Office

Research Experience

2019–Current **Brain Imaging Center**
Research Centre for Natural Sciences, Budapest
PhD Student
Longitudinal, high-resolution MRI study on aging and memory
Supervisor: Dr. Attila Keresztes
Topic: Hippocampal subfields and pattern separation in healthy aging

2019 **Brain Imaging Center**
Research Centre for Natural Sciences, Budapest
Junior Member
Carrying out EEG experiments and assisting with data analysis
Supervisor: Dr. Béla Weiss
Topic: Neural correlates of reading

2016 **Center for Lifespan Psychology**
Max Planck Institute for Human Development, Berlin
Student Research Assistant
Creating head models for EEG source localization with Matlab
Supervisors: Dr. Markus Werkle-Bergner and Dr. Myriam Sander
Project: Cognitive and Neural Dynamics of Memory Across the Lifespan

2015–2016 **Cognition in Neurological Disorders Group**
Berlin School of Mind and Brain
Student Research Assistant
Analysis of structural and functional MRI data.
Supervisor: Dr. Carsten Finke
Topic: Functional connectivity and cognition in early Multiple Sclerosis

2015–2016 **Potsdam Embodied Cognition Group**
University of Potsdam
Student Research Assistant
Organizing and running experiments using EEG and TMS
Supervisor: Dr. Claudia Gianelli
Topic: Embodied processing of language

Teaching Experience

2020– **Supervision of Theses and Course Projects** Jointly with Attila Keresztes
Psychology Bachelor and Master's Program, Eötvös Loránd University

2020–2021 **Introduction to Brain Imaging - Seminar** Jointly with Attila Keresztes
Psychology and Computational Cognitive Neuroscience Master's Program, Eötvös Loránd University

2019–2022 **Experimental Methods in Psychology - Seminar**
Psychology Bachelor Program, Eötvös Loránd University

Professional Activities

2023 **Peer-review for the journal Hippocampus**
With the supervision of Dr. Attila Keresztes

2021–2022 **ELTE Cognitive Seminar** With Réka Schvajda and Dr. Ildikó Király
Organizer
Academic talks in the topic of cognitive neuroscience open to the public

Master Thesis

Functional Brain Networks In Clinically Isolated Syndrome
Supervisors: Dr. Carsten Finke, Dr. Arno Villringer

Summer Courses

2020 **Neuromatch Academy**
Summer school in computational neuroscience

2021 **Neurohackademy**
Summer school in neuroimaging and data science

Other Work Experience

2017–2018 **Model Based Function Developer**
Robert Bosch Kft, Budapest
Software development for automotive steering systems

2013–2014 **Hungarian Store Maintainer**
'txtr eBooks, Berlin
Writing newsletters, managing and updating the eBook webstore, and communicating with publishers and business partners