ORHAN SOYUHOS

UC Davis Center for Neuroscience, 1544 Newton Ct, Davis, CA 95618

✓ osovuhos@ucdavis.edu

orhansoyuhos.com

EDUCATION

University of California - Davis, United States

Sep 2022-Present

Ph.D. student, Psychology — Designated Emphasis in Neuroengineering

University of Trento, Italy

Sep 2019-Mar 2022

M.Sc., Cognitive Science — Grade: 110/110

Thesis Title: Functional Connectivity Fingerprints of Frontal Eye Field and Inferior Frontal Junction.

Advisor: Daniel Baldauf, Ph.D.

Bogazici University, Turkey

Sep 2014-Jan 2019

B.A., Philosophy — Grade: 3.29/4.0 | Honors student

KU Leuven, Belgium

Feb 2017-Jul 2017

Exchange Student, Philosophy

RESEARCH EXPERIENCE

Graduate Researcher | Cognitive Control Lab, UC Davis

Aug 2023-Present

Mentor: Xiaomo Chen, Ph.D

Project: Selective modulation of the frontal eye field dynamics during the inactivation of parietal cortex.

Research Assistant | Attention Network Group, CIMeC

Apr 2022-Aug 2022

Mentor: Daniel Baldauf, Ph.D

Project: Intrinsic fMRI connectivity of the dorsal vs. ventral lateral prefrontal cortex.

Research Intern | Object Vision Group, CIMeC

Jan 2022-Mar 2022

Mentor: Stefania Bracci, Ph.D

Project: Object vs. scene perception: Representational similarity analyses of neural networks trained on ImageNet and Places365 datasets.

Research Intern | Attention Network Group, CIMeC

Mar 2021-Mar 2022

Mentor: Daniel Baldauf, Ph.D.

Project: Frequency-specific functional couplings of the Frontal Eye Field and Inferior Frontal Junction.

Research Intern | Donders Institute for Brain, Cognition, and Behaviour

Nov 2020-Feb 2021

Mentors: Yağmur Güçlütürk, Ph.D and Umut Güçlü, Ph.D

Project: Naturalistic video reconstruction from fMRI activity by leveraging eye-tracking.

Teaching Experience

Teaching Assistant | UC Davis Department of Psychology

 $\mathrm{Jan}\ 2023\text{-}\mathrm{Mar}\ 2023$

Courses: Psychology of Emotion.

Publications and Manuscripts

Soyuhos, O., Moore, T., Chaudhuri, R., & Chen, X. (2024). Posterior Parietal Cortex Regulates Intrinsic Neural Timescales and Attentional Processing in Frontal Eye Field. BioRxiv, 2024-10. https://doi.org/10.1101/2024.09.30.615928.

Soyuhos, O. & Baldauf, D. (2023). Functional connectivity fingerprints of the frontal eye field and inferior frontal junction suggest spatial versus nonspatial processing in the prefrontal cortex. *The European journal of neuroscience*, 57(7), 1114–1140. https://doi.org/10.1111/ejn.15936.

Presentations

- Soyuhos, O., Moore, T., Chaudhuri, R., & Chen, X. (2024). Posterior Parietal Inactivation Alters Intrinsic Neural Timescales and Attentional Processing in Frontal Eye Field Neurons. Talk given at the Bay Area Vision Research Day (BAVRD), Berkeley, CA, USA.
- Soyuhos, O., Moore, T., Chaudhuri, R., & Chen, X. (2023). Inactivation of Parietal Cortex Neurons Increases the Intrinsic Timescales of the Frontal Eye Field. Poster presented at the Society for Neuroscience (SFN) annual meeting, Washington, D.C., USA.
- Soyuhos, O. & Baldauf, D. (2022). Functional Connectivity Fingerprints of Frontal Eye Field and Inferior Frontal Junction. Poster presented at the Vision Sciences Society (VSS) annual meeting, Online, USA.

Grants and Scholarships

National Science Foundation Research Training (2152260) NeuralStorm Fellowship (\$55k)	2023-2024
Research Assistant Fellowship at CIMeC funded by the Fondazione Caritro (\$2.5k)	2022
Erasmus+ Internship Grant (\$4k)	2020-2021
Italian Ministry of Foreign Affairs and International Cooperation (MAECI) (\$12k)	2019-2021
Mehmet Zorlu Foundation Success Scholarship (\$16k)	2013-2018
Erasmus+ Study Grant (\$2k)	2017

TECHNICAL AND LANGUAGE SKILLS

Programming Languages: MATLAB, Python, R.

Software and Tools: Brainstorm, EEGLAB, Fieldtrip, SPM12, PsychToolbox, Scikit-learn, PyTorch, and Adobe Illustrator.

Languages: Turkish (native) and English.

Additional Training and Certifications

Neural Networks in Neuroscience UniTrento	Dec 2020
•	Dec 2020
Deep Learning Specialization DeepLearning.AI	Dec 2020
MATLAB Fundamentals MathWorks	Jul 2020
Machine Learning Stanford Online	Mar 2018
Introduction to Computer Science and Programming Using Python MITx	Nov 2016