# **Emin Serin**

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#### Education

- Present PhD in Neuroscience, Bernstein Center for Computational Neuroscience Berlin, Germany
- Present PhD in Neuroscience, Charité Universitätsmedizin Berlin, Germany PhD Fellow at Einstein Center for Neurosciences Berlin
- 2019 MSc in Mind and Brain, Track Brain, Humboldt-Universität zu Berlin, Germany GPA 1.1 (DE) Thesis title: "NBS-Predict: The Prediction-based Extension of Network-based Statistic"
- 2016 BSc in Psychology, İzmir University of Economics, Turkey, GPA 3.99 (TR), summa cum laude

#### **Publications**

Erdeniz, B., Tekgün, E., Menteş, Ö., Çoban, A., Bilge, S., & **Serin, E.** (2022). Bodily Self-Consciousness in Dreams Questionnaire (BSD-Q) and its relation to waking dissociative experiences. *Dreaming*.

**Serin, E.,** Zalesky, A., Matory, A., Walter, H., & Kruschwitz, J.D. (2021). NBS-Predict: A Prediction-based Extension of the Network-based Statistic. *NeuroImage*, *244*, 118625.

**Serin, E**., Önder, E., Y., Senol, A. D, & Erdeniz, B. (2018). Zindeleşme Ölçeği'nin Türkçe'ye Uyarlanması [Turkish Version of the Short-version Revised Restoration Scale]. *Türk Psikoloji Yazıları*, *21* (41).

Erdeniz, B., **Serin, E**., Ibadi, Y., & Tas, C. (2017). Decreased Functional Connectivity in Schizophrenia: The Relationship between Social Functioning and Graph Theoretical Network Measures. *Psychiatry Research: Neuroimaging, 270*, 22-31.

Metin B, Goktepe, A.K., Kaya B.S., **Serin, E.**, Tas, C., Dolu, F., & Tarhan, N. (2017). EEG Findings During Flow State. *The Journal of Neurobehavioral Sciences*, *4* (2), 47-52.

#### Preprints

Serin, E., Vaidya, N., Walter, H., & Kruschwitz, J. D. (2023, January 16). NBS-Predict: An easy-to-use toolbox for connectome-based machine learning. https://doi.org/10.31219/osf.io/cfm7j

#### **Poster Presentations**

Erdeniz, B., **Serin, E**., İbadi,Y & Tas, C. (2016). *Decreased Functional Connectivity in Schizophrenia: The Relationship Between Social Functioning and Graph Theoretical Network Measure.* Society of Applied Neuroscience Meeting. Corfu, Greece.

Erdeniz, B., **Serin, E**., Ibadi, Y., & Tas, C. (2016). *Decreased Functional Connectivity in Schizophrenia: The Relationship Between Social Functioning and Graph Theoretical Network Measures*. Fifth Biennial Conference on Resting State Brain Connectivity. Vienna, Austria.

Ibadi, Y., **Serin, E**., Krzan, K. K., Erkmen, H., Tarhan, N., & Taş, C. (2015) *Brain Correlates and Neuropsychology of Social Approach and Avoidance Behaviors in Schizophrenia*. Annual Conference on Clinical Neurophysiology and NeuroImaging. Munich, Germany

### **Conference Talks**

<u>Tutorial</u>: "Connectome-based Machine Learning using NBS-Predict". OHBM 2022, Glasgow, Scotland.

#### **Invited Talks**

The University of Melbourne, Systems Neuropsychiatry, Melbourne, Australia, 2020, "NBS-Predict: The Prediction-based Extension of Network-based Statistic"

### **Research Experience**

Charité – Universitätsmedizin Berlin, Berlin, Germany, April 2021 - Present,

Research Assistant

Research Group: Network Neuroscience and Machine Learning (Johann D. Kruschwitz) Project: Deep Connectome

• Developing a Python library called Deep Connectome (<u>Github: DeepConnectome</u>) to perform connectome-based deep learning predictions.

Charité – Universitätsmedizin Berlin, Berlin, Germany, July 2018 - February 2019,

Master's Thesis Project

Project: NBS-Predict: The Prediction-based Extension of Network-based Statistic. Supervisors: Johann D. Kruschwitz, Henrik Walter

- Designed and developed the NBS-Predict toolbox (<u>Github: NBS-Predict</u>).
- Developed functions to generate synthetic random, scale-free, and small-world networks.
- Run NBS-Predict on synthetic network data, rs-fMRI data acquired from patients with schizophrenia and healthy controls as well as on rs-fMRI data from Human Connectome Project S1200.

Humboldt Universität zu Berlin, Berlin, Germany, January 2018 - February 2019,

**Research Assistant** 

Research Group: Vittorio Gallese and Laura Kaltwasser

Project: The self-in-face identity processing with fast periodic visual stimulation

- Developed a package in MATLAB to generate phase-scrambled images.
- Programmed SSVEP paradigm for self and familiar face perception.
- Acquired EEG data and analyzed it using EEGLAB.

Izmir University of Economics, İzmir, Turkey, October 2015 – June 2016,

Research Assistant

Project: Attention restoration using VR environment (Burak Erdeniz)

- Designed and programmed tasks on attention restoration.
- Acquired and analyzed behavioral and ECG data.
- Prepared publication.

# Scholarships

2020 - Present, PhD Scholarship, Einstein Center for Neurosciences Berlin

2011 - 2016, Bachelor Scholarship, Izmir University of Economics.

## **Teaching Experience**

**Izmir University of Economics,** Izmir, Turkey, 2015 Summer Semester. Teaching Assistant in "Laboratory Techniques and Instrumentation in Psychology" course.

• Taught undergraduate psychology students how to design and program experiments for their own projects

# **Technical Skills**

Languages: MATLAB (fluent), Python (fluent), R (basic knowledge).

**Softwares/Tools/APIs:** scikit-learn, PyTorch, Keras, SPM, FSL, SPSS, Tableau 10, Psychtoolbox.