MERT ÖZKAN

mert.ozkan.gr@dartmouth.edu github.com/mert-ozkan linkedin.com/in/mert-ozkan scholar.google.com

Education

Dartmouth College, *Ph.D. Student* in Cognitive Neuroscience 2024

Bilkent University, *B.A.* in Psychology 2018

Skills

Programming: Python, R, MATLAB, *Object Oriented Programming*

Experiment Design & Analysis: Psychtoolbox, Quest, Palamedes, MNE, FieldTrip, SciPy, Scikit–Learn, rstatix, lme4

Data Handling & Visualization: pandas, NumPy, tidyverse, dplyr, seaborn, matplotlib, ggplot2, UMAP

Signal Processing: FFT, Empirical Mode Decomposition, Filtering (FIR, IIR), Wavelets, Hilbert transform

Approaches & Methodologies: Psychophysics (Signal Detection Theory, Psychometry, Adaptive Procedures), EEG (ERPs, Steady-State Visually Evoked Potentials, Time–Frequency Analyses), Eye–Tracking (Eyelink)

Machine Learning & Modeling: Optimization (Maximum Likelihood Estimation, Ordinary Least Squares), Classification (Support Vector Machines, K-Nearest Neighbor, Logistic Regression), Dimensionality Reduction (Independent Component Analysis, Principal Component Analyses), Modelling (Inverted Encoding Models, Psychometric Curve Fitting, The Normalization Model)

Statistical Testing: Linear Mixed–Effects Models, Generalized Linear Models, Bootstrapping, Permutation Analyses, Parametric Testing (*t*–tests, ANOVAs, Pearson Correlation), Non–parametric Testing (Wilcoxon Signed–Rank, chi–Square, Spearman's Rank Correlation)

Publications

Özkan, M., & Störmer, V. (2024). When spatial attention cannot be divided: Quadrantic enhancement of early visual processing across task–relevant and irrelevant locations. I*maging Neuroscience*, 2 1–18. doi: https://doi.org/10.1162/imag_a_00194

Özkan, M., Anstis, S., 't Hart, B. M., Wexler, M., & Cavanagh, P. (2021). Paradoxical stabilization of relative position in moving frames. *Proceedings of the National Academy of Sciences, 118*(25), e2102167118. doi: https://doi.org/10.1073/pnas.2102167118

Özkan, M., Tse, P.U. & Cavanagh, P. Pop-out for illusory rather than veridical trajectories with double-drift stimuli. *Atten Percept Psychophys 82*, 3065–3071 (2020). https://doi.org/10.3758/s13414-020-02035-w

Catak, E. N., **Özkan, M.,** Kafaligonul, H., & Stoner, G. R. (2022). Behavioral and ERP evidence that object-based attention utilizes fine-grained spatial mechanisms. *Cortex, 151,* 89-104. doi: https://doi.org/10.1016/j.cortex.2022.02.013

Poster Presentations

Özkan, M., Chapman, A. & Störmer, V. (2024). Flexible allocation of feature-based attention to narrow and broad ranges of colors as assessed by steady-state visual evoked potentials. *Vision Sciences Society*. St. Pete Beach, FL.

Özkan, M., Störmer, V. (2023). Multifocal attention within a single hemifield results in broad tuning of attention across relevant and irrelevant locations. *Vision Sciences Society*. St. Pete Beach, FL.

Özkan, M., Störmer, V. (2022). Splitting or Broadening the Spatial Focus of Attention Within- versus Across-Hemifields. *Object, Perception, Visual Attention and Working Memory Conference*. Boston, MA.

Özkan, M., Cavanagh, P. & Tse, P.U. (2020). Different spatial transfer of high-level and low-level priming of pop-out with the double-drift illusion. *Vision Sciences Society*. St. Pete Beach, FL.

Özkan, M., Stoner, G.R., Kafaligonul, H. (2019). Functional Links between Motion-Onset Visual Evoked Potentials and Perception. *Society for Neuroscience*. Chicago, IL.

Çatak, Esra N., Kafaligonul, H., **Özkan M.,** Stoner, G.R., (2019). Neural activation for object-based selection persists despite random changes in object features. *Society for Neuroscience*. Chicago, IL.

Özkan, M., Cavanagh, P. & Tse, P.U. (2019). Perceived rather than physical direction of the double-drift stimulus pops out in visual search. *Vision Sciences Society*. St. Pete Beach, FL

Teaching

Systems Neuroscience, *Teaching and Laboratory Assistant* 2019, 2022

Introduction to Psychology, *Teaching Assistant* 2021

Cognitive Psychology, *Teaching Assistant* 2020

Mentorship

Maya Resnick, URAD Scholar, Dartmouth College, NH

Luke B. Putelo, URAD Scholar, Dartmouth College, NH

Justin A. Santana, Undergraduate Research Assistant, Dartmouth College, NH

Esra Çatak, Doctoral Researcher, National Magnetic Resonance Research Center, Ankara

Sibel Akyüz, Doctoral Researcher, National Magnetic Resonance Research Center, Ankara

Awards and Honors

Marie Center Award for Excellence in Teaching, Dartmouth College, NH 2020

Undergraduate Research Grant, Scientific and Technological Research Council (TÜBİTAK), Turkey 2018

Full Tuition Scholarship, Bilkent University, Turkey 2013 - 2018