

# Can Oluk

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## Education

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| Ph.D. Psychology, The University of Texas at Austin<br>Thesis: Visual Target Detection Under Multiple Dimensions of Uncertainty<br>Supervisor: Prof. Wilson S. Geisler | 2016 - 2022 |
| B.A. Psychology, Minor in Philosophy, Bilkent University   | 2011 - 2016 |

## Research Experience

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|---|----------------|
| Graduate Research Assistant, Center for Perceptual Systems, U.T. Austin<br>Slant Perception, Detection under Uncertainty<br>Supervisor: Prof. Wilson S. Geisler | 2016 - Present |
| Undergraduate Thesis Student, UMRAM, Bilkent University<br>Multiplexed echo planar imaging (fMRI) Methods<br>Supervisor: Dr. Huseyin Boyaci                     | 2015 - 2016    |
| Undergraduate Research Assistant, UMRAM, Bilkent University<br>Audiovisual Associations, Rapid Motion Aftereffects<br>Supervisor: Dr. Hulusi Kafaligonul        | 2013 - 2016    |

## Teaching Experience

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|---|-------------|
| Teaching Assistant, U.T. Austin<br>PSY 323 - Perception                           | Spring 2019 |
| Teaching Assistant, Bilkent University<br>CS 121 - Introduction to Computer Tools | Fall 2013   |

## Publications

### *Working Papers*

**Oluk, C.**, and Geisler, W. S. Detection under Simultaneous Target Amplitude and Background Contrast Uncertainty

**Oluk, C.**, and Geisler, W. S. Detection under Simultaneous Target Scale and Target Orientation Uncertainty

### Journal Articles

**Oluk, C.**, Bonnen, K., Burge, J., Cormack, L. K., and Geisler, W. S. (2022). Stereo slant discrimination of planar 3D surfaces: Frontoparallel versus planar matching. *Journal of Vision*, 22(5), 6-6.

**Oluk, C.**, Pavan, A., and Kafaligonul, H. (2016). Rapid motion adaptation reveals the temporal dynamics of spatiotemporal correlation between ON and OFF pathways. *Scientific reports*, 6(1), 1-10.

Kafaligonul, H. and **Oluk, C.** (2015). Audiovisual associations alter the perception of low-level visual motion. *Frontiers in Integrative Neuroscience*, 9, 26.

### Conference Abstracts

**Oluk, C.** and Geisler, W. S. (2021). The Energy-Normalized MAX Observer Approximates the Ideal Observer Under High-levels of Simultaneous Orientation and Scale Uncertainty in White Noise. *Vision Science Society Meeting*, Florida, US.

**Oluk, C.** and Geisler, W. S. (2020). Ideal Observers for the estimation of disparity in random-pixel stereograms. *Vision Science Society Meeting*, Florida, US.

**Oluk, C.**, and Geisler, W. S. (2019). Effects of Target Amplitude Uncertainty, Background Contrast Uncertainty, and Prior Probability Are Predicted by the Normalized Template-Matching Observer. *Vision Science Society Meeting*, Florida, US.

**Oluk, C.**, Bonnen, K., Burge, J., Cormack, L., and Geisler, W. (2018). Stereo Slant Estimation of Planar Surfaces: Standard Cross-Correlation vs. Planar-Correlation. *Vision Science Society Meeting*, Florida, US.

Kafaligonul, H. and **Oluk, C.** (2014). Audiovisual associations alter the perception of low-level visual motion. *Annual Meeting of the Society for Neuroscience*, Washington, D.C., US.

Kafaligonul, H. and **Oluk, C.** (2014). Altering perception of low-level visual motion by audiovisual associations. *37th European Conference on Visual Perception*, Belgrade, Serbia.

### Grants

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| TUBITAK 2209/A, “Associative Learning and Motion Induced Plasticity” | 2015 - 2016 |
| Supervisor: Dr. Hulusi Kafaligonul                                   |             |

### Honours and Awards

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| Lloyd A. Jeffress Memorial Fellowship        | 2016, 2019  |
| Bilkent University Comprehensive Scholarship | 2011 - 2016 |
| Full tuition waiver and stipend              |             |

### Miscellaneous

*Languages:* English (advanced), Turkish (native)

*Programming Skills:* Matlab, Python, L<sup>A</sup>T<sub>E</sub>X, SPSS, Stata

*Professional Memberships*

Vision Science Society

2017 - Present

Last updated: July 1, 2022