

# Can Oluk

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## Education

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| Ph.D. Psychology, The University of Texas at Austin<br>Supervisor: Prof. Wilson S. Geisler | 2016 - 2022 |
| B.A. Psychology, Minor in Philosophy, Bilkent University                                   | 2011 - 2016 |

## Research Experience

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| Postdoctoral Researcher, Brain and Mind Institute, EPFL<br>Time course of (conscious) visual processing<br>Supervisor: Prof. Michael Herzog                     | 2024 -      |
| Postdoctoral Researcher, Laboratoire des systèmes perceptifs, ENS<br>Confidence in Motion Perception<br>Supervisor: Prof. Pascal Mamassian                      | 2023 - 2024 |
| Graduate Research Assistant, Center for Perceptual Systems, U.T. Austin<br>Slant Perception, Detection under Uncertainty<br>Supervisor: Prof. Wilson S. Geisler | 2016 - 2022 |
| 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 |

## Publications

### *Working Papers*

**Oluk, C.**, and Geisler, W. S. *Target Identification Under High Levels of Amplitude, Size, Orientation and Background Uncertainty*

**Oluk, C.**, Szinte, M., Masson, G. S. and Mamassian, P. *Confidence in Global Motion Direction Discrimination*

### *Journal Articles*

**Oluk, C.**, and Geisler, W. S. (2023). Effects of Target-Amplitude and Background-Contrast Uncertainty Predicted by a Normalized Template-Matching Observer. *Journal of Vision*, 23(12):8.

**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.**, Szinte, M., Masson, G. S., Mamassian, P. (2024). Confidence responses in global motion discrimination task are well predicted by visual reliability. *Vision Science Society Meeting*, Florida, US.

**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.

## Invited Talks

“Confidence in Global Motion Direction Discrimination” 2024  
Centre IRM - INT, Institut de Neurosciences de la Timone, Aix-Marseille Université

## Grants

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

## Honours and Awards

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

## Teaching Experience

Teaching Assistant, U.T. Austin  
PSY 323 - Perception

Spring 2019

Teaching Assistant, Bilkent University  
CS 121 - Introduction to Computer Tools

Fall 2013

## Service & Memberships

Ad Hoc Reviewer – Journal of Vision

Vision Science Society

2017-Present

## Miscellaneous

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

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

Last updated: August 10, 2024