Eberhard Karls Universität Tübingen
Experimental Cognitive Science
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Hamit Basgol

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Education

2022 – Present **Graduate Training Centre of Neuroscience, Neural Information Processing, the University of Tübingen**, Tübingen, Germany
PhD Student

2017 – 2021 **Cognitive Science, Boğaziçi University**, Istanbul, Turkey
MA Student, Advisors: *Dr Emre Ugur & Dr Inci Ayhan*
GPA: 95.25

2012 – 2016 **Psychology, Hacettepe University**, Ankara, Turkey
Bachelor Student
GPA: 85.76

Work & Research Experience

2021 – Present **Experimental Cognitive Science, Tübingen University**, *Research Assistant*.
Project: Robust Vision, CRC 1233: Task–Dependent Top-Down Modulation of Visual Processing
PIs: Dr Volker Franz & Dr Peter Dayan

2020 – 2021 **Boğaziçi University**, *Research Assistant*.
Project: A Computational Model of Event Learning and Segmentation: Event Granularity, Sensory Reliability and Expectation

2019 – 2021 **VISLAB**, *Lab Member*.
Description: Vision Lab at Boğaziçi University
PI: Dr Inci Ayhan

2018 – 2021 **COLORS**, *Lab Member*.
Description: Cognition, Learning and Robotics Lab at Boğaziçi University
PI: Dr Emre Ugur

Skills

Programing **Python**, **R**, C
Tools **PsychoPy**, **Pavlovia**, **JASP**, E-Prime 2.0, PEBL, SPSS, Octave and Matlab
Language Turkish (native), English (fluent), German (simple)
IELTS - Overall: 7.5 - Listening: 8.5, Reading: 8, Writing: 6.5, Speaking: 6.5

Publications

Paper H. Basgol, I. Ayhan, and E. Ugur, Predictive Event Segmentation and Representation with Neural Networks: A Self-Supervised Model Assessed by Psychological Experiments, 2024, Cognitive Systems Research, 83, 101167, doi: 10.1016/j.cogsys.2023.101167

Paper H. Basgol, I. Ayhan, and E. Ugur, Time Perception: A Review on Psychological, Computational and Robotic Models, IEEE Transactions on Cognitive and Developmental Systems, 2021, doi: 10.1109/TCDS.2021.3059045

Conference Publication H. Basgol and E. Ugur, Predicting Human Visual Complexity Judgments via Deep Learning, IEEE 28th Signal Processing and Communications Applications Conference (SIU), 2020, doi: 10.1109/SIU49456.2020.9302050

Conference Presentations

National H. Basgol, P. Dayan, and V. H. Franz, How Much Evidence is Required to Detect Spatiotemporal Visual Regularities?, Neurowissenschaftliche Nachwuchskonferenz 2023 (NeNa 2023), Frankfurt, Germany [poster presentation]

International H. Basgol, P. Dayan, and V. H. Franz, How Much Evidence is Required to Detect Spatiotemporal Visual Regularities?, Systems Vision Science Summer School and Symposium 2023 (SVS 2023), Tübingen, Germany, summerschool.lizhaoping.org [poster presentation]

National H. Basgol, P. Dayan, and V. H. Franz, Does Pupil-Linked Arousal to Model Reset Require Attention?, Tagung experimentell arbeitender Psycholog:innen; Conference of Experimental Psychologists (TEAP2023), Trier, Germany [poster presentation]

International H. Basgol, P. Dayan, and V. H. Franz, Pupil-Linked Arousal is Sensitive to Model Reset but not Model Update, The Psychonomic Society 63rd Meeting (Psychonomics 2022), 2022, Boston, the USA [online poster presentation]

International H. Basgol, P. Dayan, and V. H. Franz, Is Pupil-Linked Arousal a Marker of Model Violation but not Model Update?, European Conference on Visual Perception (ECVP), 2022, Nijmegen, the Netherlands [poster presentation]

International H. Basgol, I. Ayhan, and E. Ugur, A Self-Supervised and Predictive Processing-Based Model of Event Segmentation and Learning, Annual Conference of the Cognitive Science Society, Virtual, 2021

International H. Basgol, I. Ayhan, and E. Ugur, A Computational Model of Event Segmentation and Learning, ISBCS: International Virtual Symposium on Brain and Cognitive Science, Turkey, 2020

National H. Basgol, P. Dayan, and V. H. Franz, Pupil-Linked Arousal is Sensitive to Model Reset but not Model Update, Cognitive Science Center Tübingen Launch Event, 2022, Tübingen, Germany [poster presentation]

National H. Basgol, P. Dayan, and V. H. Franz, Investigating Pupil-Linked Arousal to Complex and Statistically Uncertain Auditory Patterns, Tagung experimentell arbeitender Psycholog:innen; Conference of Experimental Psychologists (TeaP2022), 2022, Online [poster presentation]

National H. Basgol ve E. Ugur, İnsan Görsel Karmaşıklık Kararlarının Derin Öğrenme ile Tahmin Edilmesi, Sinyal ve İletişim Konferansı, Türkiye, 2020

National H. Basgol ve E. Ugur, Zaman Algısına İlişkin Hesaplamalı Modeller ve Bilişsel Robotbilim Modelleri, Türkiye Robotbilim Konferansı, Türkiye, 2019

Theses Supervised

BSc Florian Leonhard Raab, 08 September 2023, Is pupil-linked arousal response sensitive to the violation of visual regularities? University of Tübingen, Main Supervisor: Dr Volker H. Franz

BSc	Emilie Ferdinand, 17 April 2023, Does environmental complexity modulate pupil dilation response linked to model reset? University of Tübingen, Main Supervisor: Dr Volker H. Franz

Colloquium Talks

Global	Pupil Dilation Responses to Auditory and Visual Uncertainties, September 08, 2023, Attention & Perception Lab, PI: Dr Cathleen Moore, the University of Iowa, Iowa, USA [online]
Local	The Modulation of Pupil Dilation Response Associated with Model Reset, April 25, 2023, Neural Information Processing, PI: Dr Felix Wichmann, University of Tübingen, Tübingen, Germany

Certificates

Summer School	Systems Vision Science Summer School & Symposium, August 14 – 24, 2023, Tübingen, Germany, summerschool.lizhaoping.org
Workshop	Research Data Management in Psychology, March 26, 2023, TEAP2023, Trier, Germany
Online Course	Computational Social Science Methods (October, 2020), Coursera by Martin Hilbert, University of California, Davis - coursera.org/verify/WHVXUW32PSSV
Online Course	Computational Neuroscience (October, 2020), Coursera by Rajesh P. N. Rao and Adrienne Fairhall, University of Washington - coursera.org/verify/P47G4UEX6A27
Online Course	Neural Networks and Deep Learning (September, 2018), Coursera by Andrew Ng, deeplearning.ai - coursera.org/verify/NKW9A5KY4ZNY

Peer Review Contributions

1	IEEE Robotics and Automation Letters
1	Neuroscience and Biobehavioral Reviews, Elsevier
2	CogSci Events, Cognitive Science Society
1	Behaviour & Information Technology, Taylor & Francis