

ENES ALTUN

EDUCATION

- 2020

Akdeniz University Department of Psychology

B.A. in Psychology

Antalya, Turkey
- 2022

Akdeniz University Department of Psychology

M.A. in Psychology

Antalya, Turkey
- Thesis: Visual Processing Of Different Race And Great Ape Faces In the Context Of Spatial Frequency: An ERP Study

https://www.tandfonline.com/doi/full/10.1080/13506285.2024.2415721

RESEARCH EXPERIENCE

- 2017  
|  
2021

Undergraduate Research Assistant

Akdeniz University Cognitive Neuroscience Lab

Antalya, Turkey

Conducted EEG data collection, wrangling, analysis, and machine learning modeling

Developed electronic devices like GSR sensors and robotic fingers using Arduino and Python
- 2021  
|  
2023

Graduate Research Assistant

Akdeniz University Cognitive Neuroscience Lab

Antalya, Turkey

Specialized in image processing, computer vision, and machine learning

INDUSTRY EXPERIENCE

- Jul 2023  
|  
Jun 2024

Rust Developer

Sobel.io

Stockholm, Sweden

Developed desktop application with Tauri using Rust and TypeScript

Adapted vision and audio models for real-time analytics and deployed ONNX models

Created Rust-based data processing pipelines and enhanced GPU compatibility
- Jun 2024  
|  
Present

Rust Developer

Empatik AI

Stockholm, Sweden

Identified and converted PyTorch-based deep learning models into ONNX format and optimized them in Rust for production deployment.

Implemented and optimized GStreamer for high-performance audio/video analysis, leveraging GPU acceleration to maximize efficiency and scalability.

Designed and implemented advanced smoothing and visualization techniques for complex time series data to enhance interpretability and insights.

Developed robust data fusion solutions for multimodal datasets using Apache Arrow, enabling efficient and scalable analytics pipelines.
- Web: [altunenes.github.io](https://altunenes.github.io)
- CONTACT INFO
- enesaltun2@gmail.com

github.com/altunenes

kaggle.com/enesaltun

personal site

ORCID

Google Scholar

in LinkedIn
- SKILLS
- Machine Learning & Deep Learning:

Model opt/Deployment: ONNX, torch

Multimodal Data Processing

Data Visualization & Analysis:

Time Series Visualization & Analysis

Parallel Data Processing: Apache Arrow, Data Fusion

Audio/Video Processing:

Media Frameworks: GStreamer (Rust-powered Low-level Development)

Software: E-Prime, BrainVision

EEG: Designing experiments, signal processing: MNE/EEGLAB/BrainVis

Programming Languages:

Python (Advanced)

R (Advanced)

JavaScript/TypeScript (Advanced)

Rust (Advanced)

GLSL/WGSL (Advanced)



## SELECTED PUBLICATIONS AND POSTERS

**Altun, E.**, Er, M. N., & Gülbetekin, E. (2024). The early visual processing of faces in a basic classification task: An ERP study of spatial frequency, other-race and other species effect. *Visual Cognition*, 1–24. <https://doi.org/10.1080/13506285.2024.2415721>

Evrım Gülbetekin, **Enes Altun**, Muhammed Nurullah Er, Arda Fidancı, Pakize Keskin & Dilara Steenken (2021). Effects of right or left face stimulation on self and other perception in enfacement illusion, *Social Neuroscience*, 16:2, 189-205, DOI: 10.1080/17470919.2021.1886983

Evrım Gülbetekin, Seda Bayraktar, Deniz Kantar Gül, Ece Varlık Özsoy, Muhammed Nurullah Er, **Enes Altun** & Arda Fidancı (2023). Does Tactile Stimulation of the Face Affect the Processing of Other Faces? Neural and Behavioural Effects of Facial Touch, *Social Neuroscience*, DOI: 10.1080/17470919.2023.2245126

Gülbetekin, E., Fidancı, A., **Altun, E.**, Er, M. N., & Gürçan, E. (2023). Effects of mask use and other-race on face perception, emotion recognition, and social distancing during the COVID-19 pandemic. *Asian Journal of Social Psychology*, 00, 1–16. <https://doi.org/10.1111/ajsp.12570>

### How do We Process Faces from Different Ethnic Groups and Species?

Gülbetekin E., Fidancı A., **Altun E.** *Society for Neuroscience Annual Meeting 2023*, Washington

### How do We Perceive Masked Faces during COVID 19 Pandemic

GÜLBETEKİN E., FIDANCI A., **ALTUN E.**, ER M. N., KAPLAN E. E. *37th Annual Meeting of the International Society for Psychophysics Fechner Day 2021*, 19 October 2021

Gülbetekin E., **Altun E.**, Er M.N., “Does own species matter? Holistic Face Perception for Great Apes”, *International Behavioral Neuroscience Society (IBNS) Online Poster Sessions*, Texas, USA, 3-7 August 2020, pp.1-1

Gülbetekin E., Bayraktar S., Varlık Özsoy E., Kantar Gök D., **Altun E.**, Er N., et al., “Effects of Tactile Stimulation on Face Perception”, *Fechner Day 2019*, Antalya, Turkey, 30 October - 2 November 2019, pp.30-30

**ALTUN E.**, Er N., Gülbetekin E. “Does genetic similarity matter? Face recognition performance for primates”, *Fechner Day 2019: 35th Annual Meeting of the International Society for Psychophysics*, Antalya, Turkey, 30 October - 2 November 2019, pp.91-92

Er N., **ALTUN E.**, Fidancı A., et al., “EFFECT OF STIMULATED FACE SIDE ON MULTISENSORY PERCEPTION”, *Fechner Day 2019: 35th Annual Meeting of the International Society for Psychophysics*, Antalya, Turkey, 30 October – 2 November 2019, pp.79-79

Evrım Gülbetekin, Seda Bayraktar, Deniz Kantar, **Enes Altun**, Nurullah Er, Arda Fidancı “Yüz Algısında Görsel-Dokunsal Uyarımın Etkileri” *18. Ulusal Sinirbilim Kongresi*, Ankara, Turkey, 6-9 Kasım 2020, PP5-045.

Altun, E. (2023). altunenes/scramblery: 1.2.5 (1.2.5). *Zenodo*. <https://doi.org/10.5281/zenodo.10028991>  
<https://github.com/altunenes/scramblery/tree/main>

Muhammed Nurullah Er, **Enes Altun**, Evrim Gülbetekin “Türler Arası Benzerlik Fark Yaratır mı? Büyük Maymun Yüzlerine Yönelik Bütünsel Yüz İşleme” *18. Ulusal Sinirbilim Kongresi*, Ankara, Turkey, 6-9 Kasım 2020, PP5-007.

Gülbetekin E., **ALTUN E.**, Er N., Fidancı A., Keskin P., İlhan Y., et al., “Ben mi, Diğeri mi?: Çok Duyumlu Uyarımın Yüz Algısı Üzerindeki Etkisi”, *20. Ulusal Psikoloji Kongresi*, Ankara, Turkey, 15-17 Kasım 2018, ss.1-1



## MANUSCRIPTS IN PROGRESS

**Altun Enes**; Er M.N; Gülbetekin E. (**Under Review**) Exploring the Distinctiveness of Early Visual Processing in Human and Illusory Faces: An ERP Study of Spatial Frequency Effects. Available at SSRN: <https://ssrn.com/abstract=4341900> or <http://dx.doi.org/10.2139/ssrn.4341900>

Alagöz F., Kürme T., **Altun E.**, Er M.N., Gülbetekin E. (**in-prep**) How do I perceive your face buddy? Investigation of facial movement of AU101 in dog faces in the context of sadness, happiness, and baby schema in the human brain: An ERP Study.

Er, M.N, **Altun E.**, Gülbetekin E. (**in-prep**) The Role of Dorsal and Ventral Visual Pathways on Holistic Processing of Individual Facial Parts: An ERP and Spatial Frequency Study



## ONGOING ACADEMIC PROJECTS

Development of the Somatosensory Stimulation Hypothesis to Explain Face and Hand Interaction:  
Akdeniz University, 2024.