

## Asst. Prof. PINAR ULUER

### Personal Information

**Office Phone:** [+90 212 227 4480](tel:+902122274480) Extension: 1465

**Email:** [puluer@gsu.edu.tr](mailto:puluer@gsu.edu.tr)

**Web:** <https://avesis.gsu.edu.tr/puluer>

### International Researcher IDs

ScholarID: V3qoN0wAAAAJ

ORCID: 0000-0003-2923-6220

Publons / Web Of Science ResearcherID: AAA-4903-2020

ScopusID: 55337137400

Yoksis Researcher ID: 184772

### Education Information

Doctorate, Istanbul Technical University, Lisansüstü Eğitim Enstitüsü, Mekatronik Mühendisliği (Dr), Turkey 2013 - 2023

Postgraduate, Galatasaray University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (YI) (Tezli), Turkey 2009 - 2013

Undergraduate, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 2005 - 2009

### Foreign Languages

English, C1 Advanced

French, C1 Advanced

### Dissertations

Doctorate, Social Behavior Learning For An Assistive Companion Robot, Istanbul Technical University, Lisansüstü Eğitim Enstitüsü, 2023

Postgraduate, Measurement of Human Driver's Authority and Implementation of Assistance System on a Simulator Study, Galatasaray Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (YI) (Tezli), 2012

### Research Areas

Robotics and Mechatronics Systems, Human and Robot Interaction, Humanoid Robots, Artificial Intelligence, Computer Learning and Pattern Recognition

### Academic Titles / Tasks

Assistant Professor, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Bilgisayar Mühendisligi, 2023 - Continues

Research Assistant, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Bilgisayar Mühendisligi, 2010 - 2023

## Courses

Principles of Programming Languages, Undergraduate, 2023 - 2024  
Algorithms and Advanced Programming, Undergraduate, 2023 - 2024  
Artificial Intelligence, Undergraduate, 2023 - 2024  
Robotics, Undergraduate, 2023 - 2024

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Challenges in Observing the Emotions of Children with Autism Interacting with a Social Robot**  
Erol Barkana D., Bartl-Pokorny K. D., Köse H., Landowska A., Milling M., Robins B., Schuller B. W., ULUER P., Wrobel M. R., Zorcec T.  
International Journal of Social Robotics, 2024 (SCI-Expanded)
- II. **Experience with an Affective Robot Assistant for Children with Hearing Disabilities**  
ULUER P., Köse H., Gumuslu E., EROL BARKANA D.  
INTERNATIONAL JOURNAL OF SOCIAL ROBOTICS, vol.15, no.4, pp.643-660, 2023 (SCI-Expanded)
- III. **Contrastive learning based facial action unit detection in children with hearing impairment for a socially assistive robot platform**  
Gurpinar C., Takır Ş., Biçer E., ULUER P., Arica N., Köse H.  
Image and Vision Computing, vol.128, 2022 (SCI-Expanded)
- IV. **Robot-Based Intervention for Children With Autism Spectrum Disorder: A Systematic Literature Review**  
Bartl-Pokorny K. D., Pykala M., ULUER P., Barkana D. E., Baird A., Köse H., Zorcec T., Robins B., Schuller B. W., Landowska A.  
IEEE ACCESS, vol.9, pp.165433-165450, 2021 (SCI-Expanded)
- V. **Sign Recognition System for an Assistive Robot Sign Tutor for Children**  
Gurpinar C., Uluer P., Akalin N., Köse H.  
INTERNATIONAL JOURNAL OF SOCIAL ROBOTICS, vol.12, no.2, pp.355-369, 2020 (SCI-Expanded)
- VI. **A New Robotic Platform for Sign Language Tutoring Humanoid Robots as Assistive Game Companions for Teaching Sign Language**  
ULUER P., Akalin N., Köse H.  
INTERNATIONAL JOURNAL OF SOCIAL ROBOTICS, vol.7, no.5, pp.571-585, 2015 (SCI-Expanded)
- VII. **The Effect of Embodiment in Sign Language Tutoring with Assistive Humanoid Robots**  
Köse H., Uluer P., Akalin N., Yorganci R., Ozkul A., İnce G.  
INTERNATIONAL JOURNAL OF SOCIAL ROBOTICS, vol.7, no.4, pp.537-548, 2015 (SCI-Expanded)
- VIII. **iSign: An Architecture for Humanoid Assisted Sign Language Tutoring**  
Köse H., Akalin N., Yorganci R., Ertugrul B. S., Kivrak H., Kavak S., Ozkul A., Gurpinar C., Uluer P., İnce G.  
INTELLIGENT ASSISTIVE ROBOTS: RECENT ADVANCES IN ASSISTIVE ROBOTICS FOR EVERYDAY ACTIVITIES, vol.106, pp.157-184, 2015 (SCI-Expanded)
- IX. **Socially Interactive Robotic Platforms as Sign Language Tutors**  
Köse H., Akalin N., Uluer P.  
INTERNATIONAL JOURNAL OF HUMANOID ROBOTICS, vol.11, no.1, 2014 (SCI-Expanded)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Exploring the Potential of Multimodal Emotion Recognition for Hearing-Impaired Children Using Physiological Signals and Facial Expressions**  
Takır Ş., Toprak E., ULUER P., Erol Barkana D., Köse H.  
25th International Conference on Multimodal Interaction, ICMI 2023 Companion, Paris, France, 9 - 13 October

2023, pp.398-405

- II. **Investigation of Physiological Features by Age Groups in Children with Autism**  
Toprak E., Bilgin Aktas S. N., Coskun B., ULUER P., Köse H., Barkana D. E.  
36th IEEE International Symposium on Computer-Based Medical Systems, CBMS 2023, L'Aquila, Italy, 22 - 24 June 2023, vol.2023-June, pp.287-292
- III. **Stress Detection of Children With ASD Using Physiological Signals Fizyolojik Sinyaller Kullanilarak Otizimli Çocuklarda Stres Tanima**  
Aktas S. N. B., ULUER P., Coskun B., Toprak E., Barkana D. E., Köse H., Zorcec T., Robins B., Landowska A.  
30th Signal Processing and Communications Applications Conference, SIU 2022, Safranbolu, Turkey, 15 - 18 May 2022
- IV. **Masking and Compression Techniques for Efficient Action Unit Detection of Children for Social Robots Sosyal Robotlar için Çocuklarda Yüz Eylem Birimi Tespitinde Maskeleye ve Sikiştirme Teknikleri**  
Biçer E., Takır Ş., Gurpınar C., ULUER P., Köse H.  
30th Signal Processing and Communications Applications Conference, SIU 2022, Safranbolu, Turkey, 15 - 18 May 2022
- V. **Stress Detection of Children with Autism using Physiological Signals in Kaspar Robot-Based Intervention Studies**  
Coskun B., ULUER P., Toprak E., Barkana D. E., Köse H., Zorcec T., Robins B., Landowska A.  
9th IEEE RAS/EMBS International Conference on Biomedical Robotics and Biomechanics, BioRob 2022, Seoul, South Korea, 21 - 24 August 2022, vol.2022-August
- VI. **A new facial expression processing system for an affectively aware robot**  
Bağlayıcı E., Gurpınar C., Uluer P., Köse H.  
25th International Conference on Pattern Recognition Workshops, ICPR 2020, Virtual, Online, 10 - 15 January 2021, vol.12662 LNCS, pp.36-51
- VII. **Physiological Data-Based Evaluation of a Social Robot Navigation System**  
Kivrak H., ULUER P., Köse H., Gumuslu E., Erol Barkana D., ÇAKMAK F., YAVUZ S.  
29th IEEE International Conference on Robot and Human Interactive Communication, RO-MAN 2020, Virtual, Naples, Italy, 31 August - 04 September 2020, pp.994-999
- VIII. **Towards An Affective Robot Companion for Audiology Rehabilitation: How Does Pepper Feel Today?**  
ULUER P., Köse H., Oz B. K., Can Aydinalev T., Barkana D. E.  
29th IEEE International Conference on Robot and Human Interactive Communication, RO-MAN 2020, Virtual, Naples, Italy, 31 August - 04 September 2020, pp.567-572
- IX. **Interactive Games with an Assistive Robotic System for Hearing-Impaired Children**  
Uluer P., Akalin N., Gurpınar C., Köse H.  
14th Association-for-the-Advancement-of-Assistive-Technology-in-Europe (AAATE) Conference - Harnessing the Power of Technology to Improve Lives, Sheffield, United Kingdom, 12 - 15 September 2017, vol.242, pp.298-305
- X. **Non-verbal Communication with a Social Robot Peer: Towards Robot Assisted Interactive Sign Language Tutoring**  
Akalin N., Uluer P., Köse H.  
14th IEEE-RAS International Conference on Humanoid Robots (Humanoids), Madrid, Spain, 18 - 20 November 2014, pp.1122-1127
- XI. **Learning Sign Language from a Social Robot Peer by Playing an Interactive Game**  
Uluer P., Akalin N., Köse H.  
14th IEEE-RAS International Conference on Humanoid Robots (Humanoids), Madrid, Spain, 18 - 20 November 2014, pp.437
- XII. **Humanoid Robots Communication with Participants Using Sign Language: An Interaction Based Sign Language Game**  
Akalin N., ULUER P., Köse H., Ince G.  
IEEE Workshop on Advanced Robotics and its Social Impacts (ARSO), Tokyo, Japan, 7 - 09 November 2013, pp.181-183

- XIII. **EVALUATION OF DRIVERS AUTHORITY IN A STRUCTURED SET OF DRIVING TASKS AND DECISIONS: PRELIMINARY RESULTS ON VEHICLE SIMULATOR STUDY**  
ULUER P., Gocmenoglu C., ACARMAN T.  
11th ASME Biennial Conference on Engineering Systems Design and Analysis, (ESDA 2012), Nantes, France, 2 - 04 July 2012, pp.803-811
- XIV. **Driver's Authority Monitoring System for Intelligent Vehicles: A Feasibility Study**  
ULUER P., Gocmenoglu C., ACARMAN T.  
IEEE Intelligent Vehicles Symposium (IV), Alcalá-De-Henares, Spain, 3 - 07 June 2012, pp.1011-1016

## Supported Projects

Köse H., Uluer P., Erasmus Project, EMBOA : Affective loop in Socially Assistive Robotics as an intervention tool for children with autism, 2019 - 2023  
Köse H., TÜBİTAK Project, Roborehab: Yardımcı Odyoloji Rehabilitasyon Robotu (118E214), 2018 - 2021  
Köse H., TÜBİTAK Project, Türkçe Den Türk İşaret Diline Otomatik Çeviri Sistemi Ve Avatar Animasyonu, 2014 - 2017  
Köse H., TÜBİTAK Project, Robot İşaret Dili Eğitmeni, 2012 - 2015

## Metrics

Publication: 23  
Citation (WoS): 75  
Citation (Scopus): 91  
H-Index (WoS): 5  
H-Index (Scopus): 5

## Awards

Uluer P., 2023 Doctorate Special Awards, İstanbul Teknik Üniversitesi, July 2024