

## Dr. Öğr. Üyesi ÖZGÜR ERKENT

### Kişisel Bilgiler

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### Uluslararası Araştırmacı ID'leri

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Publons / Web Of Science ResearcherID: Q-6423-2019

ScopusID: 16549364800

Yoksis Araştırmacı ID: 145679

### Biyografi

Ozgur Erkent is an assistant professor at [Department of Artificial Intelligence](#) at [Hacettepe University](#). His research interests include autonomous vehicles, robotics, object pose estimation, attentive vision, place recognition, semantic segmentation, object recognition, scene classification, machine learning, human-robot interaction, localization, SLAM, mechanical and electrical design of robots. He is also an external collaborator at [Team Chroma](#) at INRIA. He was working as the Starting Research Position at [Team Chroma](#) working with Christian Laugier and Christian Wolf. He was a Post-doc at [Intelligent and Interactive Systems](#) at [University of Innsbruck](#) under the supervision of Prof. Dr. Justus Piater from 2013 until 2017 August. He received his PhD in 2013 from [Department of Electrical and Electronics Engineering](#) at [Boğaziçi University](#), MSc in 2004 from [Cognitive Science Department](#) and BS from [Mechanical Engineering](#) in 2001, both from [Middle East Technical University](#).

### Eğitim Bilgileri

Doktora, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Türkiye 2007 - 2013

Yüksek Lisans, Orta Doğu Teknik Üniversitesi, Enformatik Enstitüsü, Bilişsel Bilimler Anabilim Dalı, Türkiye 2001 - 2004

Lisans, Orta Doğu Teknik Üniversitesi, Mühendislik Fakültesi, Makina Mühendisliği Bölümü, Türkiye 1997 - 2001

### Yabancı Diller

Almanca, B1 Orta

İngilizce, C2 Ustalık

Rusça, A1 Başlangıç

Fransızca, A2 Temel

### Yaptığı Tezler

Doktora, Scene Exploration and Recognition with an Attentive Robot, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, 2013

Yüksek Lisans, An Eye Movement Analysis Of Chess Players Across Levels Of Expertise: An Electrooculography Study, Orta Doğu Teknik Üniversitesi, Enformatik Enstitüsü, Bilişsel Bilimler Anabilim Dalı, 2004

## Araştırma Alanları

Robotik ve Mekatronik Sistemler, Görüntü ve Video İşleme, Örüntü Tanıma ve Analizi, Bilgisayar Öğrenimi, İnsan Bilgisayar Etkileşimi, Örüntü Tanıma ve Görüntü İşleme, Sinirsel Ağlar, Robotik, Mekatronik

## Akademik Unvanlar / Görevler

Dr. Öğr. Üyesi, Hacettepe Üniversitesi, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2021 - Devam Ediyor  
Diğer, INRIA Grenoble-Alpes, Chroma, Chroma, 2017 - 2021  
Diğer, Universitaet Innsbruck, Enformatik ve Matematik, Bilgisayar Muhendisliği, 2013 - 2017

## Verdiği Dersler

Robotiğe Giriş, Lisans, 2021 - 2022  
Robotik, Doktora, 2022 - 2023, 2021 - 2022  
Bilgisayar Mimarisi, Lisans, 2021 - 2022  
Mantık Tasarım, Lisans, 2022 - 2023, 2021 - 2022

## Yönetilen Tezler

Erkent Ö., YOLO-Based Panoptic Segmentation, Yüksek Lisans, M.Alejandro(Öğrenci), 2020

## SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Semantic Segmentation With Unsupervised Domain Adaptation Under Varying Weather Conditions for Autonomous Vehicles**  
ERKENT Ö., Laugier C.  
IEEE ROBOTICS AND AUTOMATION LETTERS, cilt.5, sa.2, ss.3580-3587, 2020 (SCI-Expanded)
- II. **Learning Semantics of Gestural Instructions for Human-Robot Collaboration**  
Shukla D., ERKENT Ö., Piater J.  
FRONTIERS IN NEUROROBOTICS, cilt.12, 2018 (SCI-Expanded)
- III. **Hierarchically self-organizing visual placememory**  
ERKENT Ö., Karaoguz H., Bozma H. I.  
ADVANCED ROBOTICS, cilt.31, sa.16, ss.865-879, 2017 (SCI-Expanded)
- IV. **RGB-D based place representation in topological maps**  
Karaoguz H., ERKENT Ö., Bozma H. I.  
MACHINE VISION AND APPLICATIONS, cilt.25, sa.8, ss.1913-1927, 2014 (SCI-Expanded)
- V. **Bubble space and place representation in topological maps**  
ERKENT Ö., Bozma H. I.  
INTERNATIONAL JOURNAL OF ROBOTICS RESEARCH, cilt.32, sa.6, ss.672-689, 2013 (SCI-Expanded)
- VI. **Artificial potential functions based camera movements and visual behaviors in attentive robots**  
ERKENT Ö., Bozma H. I.  
AUTONOMOUS ROBOTS, cilt.32, sa.1, ss.15-34, 2012 (SCI-Expanded)
- VII. **Attentive mobile robot visual maps via bubble memory**  
Cayci S., ERKENT Ö., Bozma H. I.  
PERCEPTION, cilt.38, ss.47-48, 2009 (SCI-Expanded)

## **Diğer Dergilerde Yayınlanan Makaleler**

- I. **Multi-Modal Multi-Task (3MT) Road Segmentation**  
Milli E., ERKENT Ö., Yılmaz A. E.  
IEEE Robotics and Automation Letters, cilt.8, sa.9, ss.5408-5415, 2023 (Scopus)
- II. **End-to-End Learning of Semantic Grid Estimation Deep Neural Network with Occupancy Grids**  
ERKENT Ö., Wolf C., Laugier C.  
UNMANNED SYSTEMS, cilt.7, sa.3, ss.171-181, 2019 (ESCI)

## **Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar**

- I. **LAPNet-FPN: Multi-Scale LiDAR-Aided Projective Transform Network for Real Time Semantic Grid Prediction**  
Diaz-Zapata M., Sierra-Gonzalez D., ERKENT Ö., Laugier C., Dibangoye J.  
2023 IEEE International Conference on Robotics and Automation, ICRA 2023, London, İngiltere, 29 Mayıs - 02 Haziran 2023, cilt.2023-May, ss.712-718
- II. **MultiLane: Lane Intention Prediction and Sensible Lane-Oriented Trajectory Forecasting on Centerline Graphs**  
Sierra-Gonzalez D., Paigwar A., Erkent O., Laugier C.  
25th IEEE International Conference on Intelligent Transportation Systems, ITSC 2022, Macau, Çin, 8 - 12 Ekim 2022, cilt.2022-October, ss.3657-3664
- III. **GndNet: Fast ground plane estimation and point cloud segmentation for autonomous vehicles**  
Paigwar A., Erkent Ö., Sierra-Gonzalez D., Laugier C.  
2020 IEEE/RSJ International Conference on Intelligent Robots and Systems, IROS 2020, Nevada, Amerika Birleşik Devletleri, 24 Ekim 2020 - 24 Ocak 2021, ss.2150-2156
- IV. **Instance Segmentation with Unsupervised Adaptation to Different Domains for Autonomous Vehicles**  
Diaz-Zapata M., Erkent Ö., Laugier C.  
16th IEEE International Conference on Control, Automation, Robotics and Vision (ICARCV), Shenzhen, Çin, 13 - 15 Aralık 2020, ss.421-427
- V. **Recognize Moving Objects Around an Autonomous Vehicle Considering a Deep-learning Detector Model and Dynamic Bayesian Occupancy**  
Hernandez A. E. G., Erkent Ö., Laugier C.  
16th IEEE International Conference on Control, Automation, Robotics and Vision (ICARCV), Shenzhen, Çin, 13 - 15 Aralık 2020, ss.414-420
- VI. **Leveraging Dynamic Occupancy Grids for 3D Object Detection in Point Clouds**  
Sierra-Gonzalez D., Paigwar A., Erkent Ö., Dibangoye J., Laugier C.  
16th IEEE International Conference on Control, Automation, Robotics and Vision (ICARCV), Shenzhen, Çin, 13 - 15 Aralık 2020, ss.1188-1193
- VII. **Attentional PointNet for 3D-Object Detection in Point Clouds**  
Paigwar A., Erkent Ö., Wolf C., Laugier C.  
32nd IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), California, Amerika Birleşik Devletleri, 16 - 20 Haziran 2019, ss.1297-1306
- VIII. **Semantic Grid Estimation with Occupancy Grids and Semantic Segmentation Networks**  
ERKENT Ö., Wolf C., Laugier C.  
15th International Conference on Control, Automation, Robotics and Vision (ICARCV), Singapore, Singapur, 18 - 21 Kasım 2018, ss.1051-1056
- IX. **Modeling Driver Behavior From Demonstrations in Dynamic Environments Using Spatiotemporal Lattices**  
Gonzalez D. S., ERKENT Ö., Romero-Cano V., Dibangoye J., Laugier C.  
IEEE International Conference on Robotics and Automation (ICRA), Brisbane, Avustralya, 21 - 25 Mayıs 2018,

- X. **Semantic Grid Estimation with a Hybrid Bayesian and Deep Neural Network Approach**  
ERKENT Ö., Wolf C., Laugier C., Gonzalez D. S., Romero Cano V.  
25th IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Madrid, İspanya, 1 - 05 Ekim 2018, ss.888-895
- XI. **Visual Task Outcome Verification Using Deep Learning**  
ERKENT Ö., Shukla D., Piater J.  
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS) / Workshop on Machine Learning Methods for High-Level Cognitive Capabilities in Robotics, Vancouver, Kanada, 24 - 28 Eylül 2017, ss.4821-4827
- XII. **Supervised learning of gesture-action associations for human-robot collaboration**  
Shukla D., ERKENT Ö., Piater J.  
12th IEEE International Conference on Automatic Face and Gesture Recognition (FG), Washington, Kiribati, 30 Mayıs - 03 Haziran 2017, ss.778-783
- XIII. **Proactive, Incremental Learning of Gesture-Action Associations For Human-Robot Collaboration**  
Shukla D., ERKENT Ö., Piater J.  
26th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Lisbon, Portekiz, 28 Ağustos - 01 Eylül 2017, ss.346-353
- XIV. **A Multi-View Hand Gesture RGB-D Dataset for Human-Robot Interaction Scenarios**  
Shukla D., ERKENT Ö., Piater J.  
25th IEEE International Symposium on Robot and Human Interactive Communication (IEEE RO-MAN), New York, Amerika Birleşik Devletleri, 26 - 31 Ağustos 2016, ss.1084-1091
- XV. **Integration of Probabilistic Pose Estimates from Multiple Views**  
ERKENT Ö., Shukla D., Piater J.  
14th European Conference on Computer Vision (ECCV), Amsterdam, Hollanda, 8 - 16 Ekim 2016, cilt.9911, ss.154-170
- XVI. **Probabilistic detection of pointing directions for human-robot interaction**  
Shukla D., ERKENT Ö., Piater J.  
International Conference on Digital Image Computing: Techniques and Applications, Adelaide, Avustralya, 23 - 25 Kasım 2015, ss.601-608
- XVII. **The Effects of Social Gaze in Human-Robot Collaborative Assembly**  
Fischer K., Jensen L. C., Kirstein F., Stabinger S., ERKENT Ö., Shukla D., Piater J.  
7th International Conference on Social Robotics (ICSR), Paris, Fransa, 26 - 30 Ekim 2015, cilt.9388, ss.204-213
- XVIII. **General Object Tip Detection and Pose Estimation for Robot Manipulation**  
Shukla D., ERKENT Ö., Piater J.  
10th International Conference on Computer Vision Systems (ICVS), Copenhagen, Danimarka, 6 - 09 Temmuz 2015, cilt.9163, ss.364-374
- XIX. **Long-Term Topological Place Learning**  
ERKENT Ö., Bozma H. I.  
IEEE International Conference on Robotics and Automation (ICRA), Washington, Amerika Birleşik Devletleri, 26 - 30 Mayıs 2015, ss.5462-5467
- XX. **Place Representation in Topological Maps Based on Bubble Space**  
ERKENT Ö., Bozma I.  
IEEE International Conference on Robotics and Automation (ICRA), Minnesota, Amerika Birleşik Devletleri, 14 - 18 Mayıs 2012, ss.3497-3502
- XXI. **Color in Attention Control**  
ERKENT Ö., Bozma H. I.  
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Türkiye, 9 - 11 Nisan 2009, ss.467-470
- XXII. **Saccades and fixating using artificial potential functions**  
Ilhan B. D., ERKENT Ö., Bozma H. I.  
IEEE/RSJ International Conference on Intelligent Robots and Systems, Beijing, Çin, 9 - 13 Ekim 2006, ss.5819-5820

## **Metrikler**

Yayın: 31

Atf (WoS): 127

Atf (Scopus): 207

H-İndeks (WoS): 6

H-İndeks (Scopus): 9