

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

Ozgun 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

Atıf (WoS): 127

Atıf (Scopus): 207

H-İndeks (WoS): 6

H-İndeks (Scopus): 9