

Asst. Prof. KAYA TURGUT

Personal Information

Email: kturgut@ogu.edu.tr

Web: <https://avesis.ogu.edu.tr/kturgut>

International Researcher IDs

ORCID: 0000-0003-3345-9339

Yoksis Researcher ID: 197348

Education Information

Doctorate, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 2016 - 2022

Postgraduate, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, ELEKTRİK-ELEKTRONİK MÜHENDİSLİĞİ BÖLÜMÜ, Turkey 2013 - 2016

Research Areas

Field and Service Robots, Computer Vision, 3D Impressions, Computer Vision, Artificial Intelligence, Computer Learning and Pattern Recognition

Academic Titles / Tasks

Research Assistant, Eskisehir Osmangazi University, MÜHENDİSLİK-MİMARLIK FAKÜLTESİ, Elektrik-Elektronik Mühendisliği Bölümü, 2013 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Local region-learning modules for point cloud classification**
TURGUT K., DUTAĞACI H.
MACHINE VISION AND APPLICATIONS, vol.35, no.1, 2024 (SCI-Expanded)
- II. **Segmentation of structural parts of rosebush plants with 3D point-based deep learning methods**
TURGUT K., DUTAĞACI H., Galopin G., Rousseau D.
Plant Methods, vol.18, no.1, 2022 (SCI-Expanded)
- III. **Surface profile-guided scan method for autonomous 3D reconstruction of unknown objects using an industrial robot**
Özkan M., Seçil S., Turgut K., Dutağacı H., Uyanık C., Parlaktuna O.
Visual Computer, vol.38, no.11, pp.3953-3977, 2022 (SCI-Expanded)
- IV. **RoseSegNet: An attention-based deep learning architecture for organ segmentation of plants**
TURGUT K., DUTAĞACI H., Rousseau D.
BIOSYSTEMS ENGINEERING, vol.221, pp.138-153, 2022 (SCI-Expanded)
- V. **2DLaserNet: A deep learning architecture on 2D laser scans for semantic classification of mobile robot locations**
KALECİ B., TURGUT K., DUTAĞACI H.

Articles Published in Other Journals

- I. **COMPARISON OF DEEP LEARNING TECHNIQUES FOR DETECTION OF DOORS IN INDOOR ENVIRONMENTS**
Kaleci B., Turgut K.
Eskişehir Osmangazi Üniversitesi Mühendislik ve Mimarlık Fakültesi Dergisi, vol.29, no.3, pp.396-412, 2021 (Peer-Reviewed Journal)
- II. **A Comparative Study of Point-Based Deep Learning Techniques for Semantic Classification in Search and Rescue Arenas**
Turgut K., Kaleci B.
International Journal of Advances in Engineering and Pure Sciences, vol.33, no.57, pp.57-66, 2021 (Peer-Reviewed Journal)
- III. **A Mobile Robot Application for Constructing Semantic and Metric Maps of Search and Rescue Arenas with Point-Based Deep Learning**
Kocaoğlu M., Işıkdemir Y. E., Uzun M. A., Taş M. O., Turgut K., Kaleci B.
Journal of Scientific, Technology and Engineering Research, vol.2, no.1, pp.11-22, 2021 (Peer-Reviewed Journal)
- IV. **İç Ortamlarda Robot Konumlarının Anlamsal Sınıflandırılması için 2B Lazer Verisi ile PointNet Uygulaması**
TURGUT K., KALECİ B.
Uluslararası Doğu Anadolu Fen Mühendislik ve Tasarım Dergisi, vol.2, no.2, pp.229-246, 2020 (Peer-Reviewed Journal)
- V. **A Comparative Study for Indoor Planar Surface Segmentation via 3D Laser Point Cloud Data**
Eruyar E. E., Yılmaz M., Yılmaz B., Akbulut O., TURGUT K., KALECİ B.
Black Sea Journal of Engineering and Science, vol.3, no.4, pp.128-137, 2020 (Peer-Reviewed Journal)
- VI. **NOKTA BULUTU VERİSİ İLE KURAL TABANLI AÇIK KAPI BULMA YÖNTEMİ**
KALECİ B., TURGUT K.
Eskişehir Osmangazi Üniversitesi Mühendislik ve Mimarlık Fakültesi Dergisi, vol.28, no.2, pp.164-173, 2020 (Peer-Reviewed Journal)
- VII. **A PointNet Application for Semantic Classification of Ramps in Search and Rescue Arenas**
TURGUT K., KALECİ B.
International Journal of Intelligent Systems and Applications in Engineering, vol.7, no.3, pp.159-165, 2019 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Robustness of 3D point-based deep learning for plant organ segmentation against point density variation and noise**
TURGUT K., DUTAĞACI H., Rousseau D.
North American Plant Phenotyping Network Annual Conference, St. Louis, Missouri, United States Of America, 13 February 2023
- II. **PLANesT-3D: A new annotated data set of 3D color point clouds of plants**
Mertoglu K., Salk Y., Sarikaya S. K., TURGUT K., EVRENOSOĞLU Y., ÇEVİKALP H., Gerek O. N., DUTAĞACI H., Rousseau D.
31st IEEE Conference on Signal Processing and Communications Applications (SIU), İstanbul, Turkey, 5 - 08 July 2023
- III. **Arama ve Kurtarma Alanlarındaki Rampaların Anlamsal Sınıflandırması için Derin Öğrenme Tekniklerinin Karşılaştırılması**

TURGUT K., KALECİ B.

ASYU 2020 Akıllı Sistemlerde Yenilikler ve Uygulamaları Konferansı, Turkey, 15 - 17 October 2020

- IV. **Düzensiz Nokta Bulutu Verileri için Sekizli Ağaç Veri Yapısı ile Ayır ve Birleştir Tabanlı Düzlem Bölütleme Yöntemi**
Yılmaz M., Eruyar E. E., Yılmaz B., Akbulut O., TURGUT K., KALECİ B.
ASYU 2020 Akıllı Sistemlerde Yenilikler ve Uygulamaları Konferansı, Turkey, 15 - 17 October 2020
- V. **Semantic Place Classification of 2D Laser Data with A Simple Deep Learning Architecture**
TURGUT K., KALECİ B.
International Conference On Access To Recent Advances In Engineering And Digitalization, 5 - 07 March 2020
- VI. **A Deep Learning Architecture for Place Classification in Indoor Environment via 2D Laser Data**
TURGUT K., KALECİ B.
IEEE 3rd International Symposium on Multidisciplinary Studies and Innovative Technologies, 11 - 13 October 2019
- VII. **Plane Segmentation of Point Cloud Data Using Split and Merge Based Method**
KALECİ B., TURGUT K.
IEEE 3rd International Symposium on Multidisciplinary Studies and Innovative Technologies, 11 - 13 October 2019
- VIII. **İç Ortamlarda 2B Lazer Verisi Kullanılarak Çok-Katmanlı Algılayıcılar ile Konum Sınıflandırma**
KALECİ B., TURGUT K.
OTOMATİK KONTROL TÜRK MİLLİ KOMİTESİ ULUSAL TOPLANTISI, Turkey, 11 - 14 September 2019
- IX. **İç Ortamlarda Nokta Bulutu Kullanılarak Bakış Açısı Öznitelik Histogramı Tabanlı Nesne Sınıflandırma**
caran f., Tuğrul G., Göven Ü., TURGUT K., KALECİ B.
OTOMATİK KONTROL TÜRK MİLLİ KOMİTESİ ULUSAL TOPLANTISI, Turkey, 11 - 14 September 2019
- X. **Nokta Bulutu Verisi için Ayır ve Birleştir Tabanlı Düzlem Bölütleme Yöntemi**
Cangür M. C., Çilce Y., Karadağ M. A., TURGUT K., KALECİ B.
OTOMATİK KONTROL TÜRK MİLLİ KOMİTESİ ULUSAL TOPLANTISI, Turkey, 11 - 14 September 2019
- XI. **A Mobile Robot Application for 3D Object Classification via Point Cloud Data in Indoor Environment**
caran f., tuğrul g., göven ü., TURGUT K., KALECİ B.
International Congress on Human Computer Interaction, Optimization and Robotic Applications, 5 - 07 July 2019
- XII. **3B Nokta Bulutu Verisi ile Bölge Büyütme Tabanlı Kapı Bulma Uygulaması**
bayram k., kolaylı b., solak a., tatar b., TURGUT K., KALECİ B.
Türkiye Robot Bilim Konferansı 2019, Turkey, 26 - 28 June 2019
- XIII. **SPGS: A new method for autonomous 3D reconstruction of unknown objects by an industrial robot**
UYANIK C., SEÇİL S., ÖZKAN M., DUTAĞACI H., TURGUT K., PARLAKTUNA O.
19th Annual Conference on Towards Autonomous Robotic Systems, TAROS 2018, Bristol, England, 25 - 27 July 2018, vol.10965 LNAI, pp.15-27
- XIV. **A Method for Determining Local Coordinate Frames Attached to Objects by a Laser Profile Sensor in Industrial Robot Workspaces**
TURGUT K., DUTAĞACI H., Söyleyici C., SEÇİL S., ÖZKAN M., PARLAKTUNA O., PARLAKTUNA M.
2017 IEEE International Conference on Autonomous Robot Systems and Competitions, Coimbra, Portugal, 26 April - 28 December 2017, pp.260-265
- XV. **The Diagnosis of Melanoma Skin Cancer Using Some Feature Descriptors**
TURGUT K., KILINÇ Ç., ERGİN S.
International Conference on Advanced Technology and Sciences (ICAT'xx17), İstanbul, Turkey, 9 - 12 May 2017, pp.80-82
- XVI. **A Robotic System for Autonomous 3-D Surface Reconstruction of Objects. Design and Implementation**
SEÇİL S., TURGUT K., Söyleyici C., ÖZKAN M., PARLAKTUNA O., DUTAĞACI H., PARLAKTUNA M.
2017 The 3rd International Conference on Control and Automation and Robotics (ICCAR 2017), Nagoya, Japan, 22 - 24 April 2017, pp.188-191
- XVII. **A Method for Determining Local Coordinate Frames Attached to Objects by a Laser Profile Sensor in Industrial Robot Workspaces**

TURGUT K., DUTAĞACI H., Soyleyici C., SEÇİL S., ÖZKAN M., PARLAKTUNA O., Parlaktuna M.
17th IEEE International Conference on Autonomous Robot Systems and Competitions (ICARSC), Coimbra,
Portugal, 26 - 28 April 2017, pp.260-265

- XVIII. **A Robotic System for Autonomous 3-D Surface Reconstruction of Objects**
SEÇİL S., TURGUT K., Soyleyici C., ÖZKAN M., PARLAKTUNA O., DUTAĞACI H., Parlaktuna M.
3rd IEEE International Conference on Control, Automation and Robotics (ICCAR), Nagoya, Japan, 22 - 24 April
2017, pp.188-191
- XIX. **Endüstriyel Robot Programlamada Yeni Bir Yöntem**
SEÇİL S., PARLAKTUNA O., TURGUT K., ÖZKAN M.
TÜRKİYE ROBOTBİLİM KONFERANSI (ToRK 2016), İstanbul, Turkey, 2 - 03 November 2016
- XX. **Design of an Application Programming Interface (API) for Commercial Industrial Robots**
SEÇİL S., Soyleyici C., ÖZKAN M., PARLAKTUNA O., DUTAĞACI H., TURGUT K., Parlaktuna M.
14th IEEE International Conference on Industrial Informatics (INDIN), Poitiers, France, 19 - 21 July 2016, pp.225-
230
- XXI. **Simple Programming Scheme for Industrial Robot Manipulators A Case Study For Feasibility Proof**
SEÇİL S., TURGUT K., PARLAKTUNA O., ÖZKAN M.
International Symposium on Innovations in Intelligent SysTems and Applications (INISTA 2015), Madrid, Spain, 2 -
04 September 2015, pp.27-33
- XXII. **Lazer Profil Algılayıcı ve Endüstriyel Robot Kullanımı ile 3 B Görselleştirme Sistemi**
SEÇİL S., TURGUT K., ÖZKAN M., PARLAKTUNA O.
Türkiye Otonom Robotlar Konferansı (TORK 2014), Ankara, Turkey, 6 - 07 November 2014
- XXIII. **3-D Visualization System for Geometric Parts Using a Laser Profile Sensor and an Industrial Robot**
SEÇİL S., TURGUT K., PARLAKTUNA O., ÖZKAN M.
IEEE International Symposium on Robotics and Manufacturing Automation (IEEE-ROMA), Kuala-Lumpur, Malaysia,
15 - 16 December 2014, pp.160-165

Metrics

Publication: 35

Citation (WoS): 40

Citation (Scopus): 50

H-Index (WoS): 3

H-Index (Scopus): 4

Scholarships

2214 International Doctor Research Fellowship Program, TUBITAK, 2021 - 2022

Non Academic Experience

University of Angers