

Asst. Prof. EMRAH BENLİ

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAC-5089-2019

ScopusID: 57194856620

Yoksis Researcher ID: 302265

Education Information

Post Doctorate, U.S. Army Combat Capabilities Development Command (DEVCOM) Army Research Laboratory, Adelphi Laboratory Center, Computational and Information Sciences Directorate (CISD), United States Of America 2017 - 2018

Doctorate, Virginia Commonwealth University, College of Engineering, Electrical and Computer Engineering, United States Of America 2013 - 2017

Postgraduate, Clemson University, College of Engineering, Electrical Engineering, United States Of America 2011 - 2013

Undergraduate, Kocaeli University, Mühendislik Fakültesi, Elektronik Ve Haberleşme Mühendisliği, Turkey 2004 - 2009

Foreign Languages

English, C2 Mastery

Dissertations

Doctorate, OMNI-DIRECTIONAL INFRARED 3D RECONSTRUCTION AND TRACKING OF HUMAN TARGETS, Virginia Commonwealth University, College of Engineering, Electrical and Computer Engineering, 2017

Research Areas

Smart Factors, Field and Service Robots, Computer Vision, Human and Robot Interaction, Humanoid Robots, Mechatronic Systems, Route and Motion Planning, Image and Video Processing, Pattern Recognition and Analysis, 3D Impressions, Pattern Recognition and Image Processing

Academic Titles / Tasks

Assistant Professor, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, 2020 - Continues

Academic and Administrative Experience

Deputy Head of Department, Karadeniz Technical University, Mühendislik Fakültesi, Elektrik-Elektronik, 2022 - Continues

Courses

Robotic Vision and Control, Doctorate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Measurements in Electrical Engineering, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Measurements in Electrical Engineering, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Introduction To Computers, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Engineering Design, Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022, 2020 - 2021
Professional Training, Undergraduate, 2023 - 2024, 2022 - 2023
Mechatronics, Doctorate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Introduction to Electrical and Electronics Engineering, Undergraduate, 2023 - 2024, 2022 - 2023
Introduction To Computers (in Turkish), Undergraduate, 2023 - 2024, 2022 - 2023, 2021 - 2022
Electrical and Electronics, Undergraduate, 2021 - 2022, 2020 - 2021
Engineering Design, Undergraduate, 2022 - 2023
Electronic Device Techniques, Undergraduate, 2020 - 2021
Electronic Device Techniques, Undergraduate, 2020 - 2021
Graduation Project, Undergraduate, 2021 - 2022
Mühendislik Tasarımı, Undergraduate, 2020 - 2021
Control Systems - II, Undergraduate, 2019 - 2020
Bitirme Projesi, Undergraduate, 2020 - 2021
Elektrik Devreleri Laboratuvarı - II, Undergraduate, 2019 - 2020
Control Systems - I, Undergraduate, 2019 - 2020
Image Processing, Undergraduate, 2019 - 2020
Bitirme Çalışması, Undergraduate, 2019 - 2020

Advising Theses

Benli E., MULTIPLE TARGET LOCALIZATION WITH LIDAR-CAMERA SENSOR FUSION, Postgraduate, G.SENA(Student), 2024

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **DeepFuseNet of Omnidirectional Far-Infrared and Visual Stream for Vegetation Detection**
Stone D. L., Ravi S., Benli E., Motai Y.
IEEE Transactions on Geoscience and Remote Sensing, vol.59, pp.9057-9070, 2021 (SCI-Expanded)
- II. **Robust Detection of Infrared Maritime Targets for Autonomous Navigation**
Wang B., Benli E., Motai Y., Dong L., Xu W.
IEEE TRANSACTIONS ON INTELLIGENT VEHICLES, vol.5, no.4, pp.635-648, 2020 (SCI-Expanded)
- III. **Visual Perception for Multiple Human-Robot Interaction From Motion Behavior**
BENLİ E., Motai Y., Rogers J.
IEEE SYSTEMS JOURNAL, vol.14, no.2, pp.2937-2948, 2020 (SCI-Expanded)
- IV. **Thermal Multisensor Fusion for Collaborative Robotics**
Benli E., Spidalieri R. L., Motai Y.
IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS, vol.15, no.7, pp.3784-3795, 2019 (SCI-Expanded)
- V. **Human Behavior-Based Target Tracking With an Omni-Directional Thermal Camera**

Benli E., Motai Y., Rogers J.

IEEE TRANSACTIONS ON COGNITIVE AND DEVELOPMENTAL SYSTEMS, vol.11, pp.36-50, 2019 (SCI-Expanded)

VI. Dynamic 3-D Reconstruction of Human Targets via an Omni-Directional Thermal Sensor

Benli E., Rahlf J., Motai Y.

IEEE SENSORS JOURNAL, vol.18, no.17, pp.7209-7221, 2018 (SCI-Expanded)

Articles Published in Other Journals

I. Altı Serbestlik Dereceli Robot Manipülatörün Ters Kinematik Analizi İçin Gko Ve Çdde Algoritmalarının Karşılaştırmalı Analizi

Hocaoğlu G. S., Çavli N., Benli E.

Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.26, no.78, pp.449-457, 2024 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

I. SEMI-SUPERVISED SEGMENTATION FOR AUTONOMOUS VEHICLE OF OFF-ROADS

Zengin S., Hocaoğlu G. S., Benli E.

5th International Conference on Engineering and Applied Natural Sciences ICEANS 2024, Konya, Turkey, 25 - 26 August 2024, pp.792-799

II. Motion Prediction Classification for Wall-Following Robot Navigation

ÇAVLI N., Koban N., BENLİ E., ATASOY A.

8th International Scientific Conference "Telecommunications, Informatics, Energy and Management" – TIEM 2023, Bandırma, Turkey, 1 - 03 December 2023

III. Autonomous Rechargeable Occupational Safety Robot

Sağlam A., Eşkil Ş., Hız Ş., Benli E., Hocaoğlu G. S.

2023 Innovations in Intelligent Systems and Applications Conference (ASYU), Sivas, Turkey, 11 - 13 October 2023, pp.1-6

IV. 7 DOF Robotic Arm Inverse Kinematic Analysis with Cuckoo and Whale Algorithms

Koban N., Çavli N., Doğan H., Benli E.

2023 Innovations in Intelligent Systems and Applications Conference (ASYU), Sivas, Turkey, 11 - 13 October 2023, pp.1-6

V. Mapping and Navigation on Rough Surface with LIDAR and IMU

Adanur F., Kabataş M., Benli E.

2022 Innovations in Intelligent Systems and Applications Conference (ASYU), Antalya, Turkey, 7 - 09 September 2022, pp.1-5

VI. Neural Network-Based Serum Flow Rate Control

Çetin G., Benli E., Şenyiğit Ş.

Innovations in Intelligent Systems and Applications Conference, Elazığ, Turkey, 6 - 08 October 2021

Supported Projects

BENLİ E., SARICA B. E., SEVGİ R., Project Supported by Higher Education Institutions, Engel Arkasındaki İnsanı Tespit Eden Robotu, 2024 - Continues

ATASOY A., SEVİM Y., HACIOĞLU G., ÖZKOP E., BENLİ E., TURHAL M., YAZGAN A., DANAYİYEN Y., ÖZTÜRK M., Project Supported by Higher Education Institutions, Yenilikçi Laboratuvar Yaklaşımlarının Elektrik Elektronik Mühendisliği Eğitimine Uygulanması, 2022 - Continues

BENLİ E., ÜLKER S. R., ÖZER M. C., ÖZKÖK Ö. S., Project Supported by Higher Education Institutions, Otonom kamufle

lazer işaretleme sistemi, 2024 - 2024

Benli E., Özkösemen A., TUBITAK Project, Autonomous Arterial Injection Robot, 2023 - 2024

BENLİ E., HOCAOĞLU G. S., Project Supported by Higher Education Institutions, LIDAR-Kamera Sensör Füzyonu İle Çoklu Hedef Konumlandırılması, 2023 - 2024

BENLİ E., SAĞLAM A., HIZ Ş., ESKİL Ş., Project Supported by Higher Education Institutions, Otonom şarj edilebilen iş güvenliği robotu, 2023 - 2023

BENLİ E., ÇOLAK N., YILDIZ S., AKÇA G., MERAL E., Project Supported by Higher Education Institutions, 2D Lidar ile 3D Duvar ve Zemin Tespiti, 2023 - 2023

BENLİ E., BAYRAM F., DEMİRCİ H. C., İLERİ E. S., Project Supported by Higher Education Institutions, AGV-AIV SİSTEMLERİNDE GELİŞTİRİLMİŞ YÜK ALGILAMALI OTONOM YÜK TAŞIMA ARACI, 2023 - 2023

Benli E., Bayram F., TUBITAK Project, AGV-AIV sistemlerinde geliştirilmiş engel algılamalı otonom yük aracı , 2022 - 2023

Scientific Refereeing

IEEE TRANSACTIONS ON AUTOMATION SCIENCE & ENGINEERING, SCI Journal, November 2024

IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS, SCI Journal, August 2024

IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS, SCI Journal, July 2024

IEEE TRANSACTIONS ON HUMAN-MACHINE SYSTEMS, SCI Journal, June 2024

IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS, SCI Journal, June 2024

IEEE Transactions on Intelligent Vehicles, SCI Journal, May 2024

IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS, SCI Journal, March 2024

IEEE Transactions on Intelligent Vehicles, SCI Journal, September 2023

Innovations in Intelligent Systems and Applications 2023, Conference Paper (Full Text), August 2023

JOURNAL OF ROBOTICS, Journal Indexed in ESCI, July 2023

IEEE SYSTEMS JOURNAL, SCI Journal, June 2023

IEEE TRANSACTIONS ON AUTOMATION SCIENCE & ENGINEERING, SCI Journal, May 2023

IEEE SYSTEMS JOURNAL, SCI Journal, April 2023

IEEE SYSTEMS JOURNAL, SCI Journal, April 2023

IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS II: EXPRESS BRIEFS, SCI Journal, March 2023

IEEE SYSTEMS JOURNAL, SCI Journal, February 2023

IEEE TRANSACTIONS ON AUTOMATION SCIENCE & ENGINEERING, SCI Journal, February 2023

IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS II: EXPRESS BRIEFS, SCI Journal, January 2023

IEEE SYSTEMS JOURNAL, SCI Journal, January 2023

IEEE SENSORS JOURNAL, SCI Journal, January 2023

IEEE SYSTEMS JOURNAL, SCI Journal, January 2023

IEEE TRANSACTIONS ON AUTOMATION SCIENCE & ENGINEERING, SCI Journal, December 2022

IEEE SYSTEMS JOURNAL, SCI Journal, December 2022

IEEE SENSORS JOURNAL, SCI Journal, December 2022

IEEE SENSORS JOURNAL, SCI Journal, November 2022

IEEE SYSTEMS JOURNAL, SCI Journal, November 2022

IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS II: EXPRESS BRIEFS, SCI Journal, October 2022

IEEE TRANSACTIONS ON AUTOMATION SCIENCE & ENGINEERING, SCI Journal, October 2022

IEEE Transactions on Intelligent Vehicles, SCI Journal, October 2022

IEEE Transactions on Intelligent Vehicles, SCI Journal, September 2022

IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS II-EXPRESS BRIEFS, SCI Journal, August 2022

IEEE TRANSACTIONS ON AUTOMATION SCIENCE & ENGINEERING, SCI Journal, August 2022

IEEE SYSTEMS JOURNAL, SCI Journal, August 2022

IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS II-EXPRESS BRIEFS, SCI Journal, July 2022

IEEE TRANSACTIONS ON AUTOMATION SCIENCE AND ENGINEERING, SCI Journal, May 2022

IEEE SYSTEMS JOURNAL, SCI Journal, May 2022

IEEE SYSTEMS JOURNAL, SCI Journal, April 2022
IEEE SYSTEMS JOURNAL, SCI Journal, March 2022
IEEE SYSTEMS JOURNAL, SCI Journal, February 2022
IEEE TRANSACTIONS ON AUTOMATION SCIENCE AND ENGINEERING, SCI Journal, February 2022
IEEE TRANSACTIONS ON AUTOMATION SCIENCE AND ENGINEERING, SCI Journal, January 2022
IEEE SYSTEMS JOURNAL, SCI Journal, January 2022
IEEE SYSTEMS JOURNAL, SCI Journal, December 2021
IEEE SYSTEMS JOURNAL, SCI Journal, November 2021
IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS II-EXPRESS BRIEFS, SCI Journal, October 2021
IEEE SYSTEMS JOURNAL, SCI Journal, September 2021
IEEE TRANSACTIONS ON AUTOMATION SCIENCE AND ENGINEERING, SCI Journal, September 2021
IEEE SYSTEMS JOURNAL, SCI Journal, August 2021
ASYU 2021, Conference Paper (Full Text), August 2021
IEEE SYSTEMS JOURNAL, SCI Journal, August 2021
IEEE SYSTEMS JOURNAL, SCI Journal, July 2021
IEEE International Conference On Intelligent Transportation Systems (ITSC), Conference Paper (Full Text), June 2021
IEEE International Conference On Intelligent Transportation Systems (ITSC), Conference Paper (Full Text), June 2021
IEEE International Conference on Intelligent Transportation Systems (ITSC), Conference Paper (Full Text), June 2021
International Journal of Computational Science and Engineering (IJCSE), Other Indexed Journal, May 2021
IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, SCI Journal, May 2021
IEEE/RSJ INTERNATIONAL CONFERENCE ON INTELLIGENT ROBOTS AND SYSTEMS (IROS), Conference Paper (Full Text), April 2021
IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, SCI Journal, April 2021
IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, SCI Journal, March 2021
International Journal of Computational Science and Engineering (IJCSE), Other Indexed Journal, February 2021
IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, SCI Journal, January 2021
IEEE TRANSACTIONS ON INTELLIGENT TRANSPORTATION SYSTEMS, SCI Journal, November 2020
IEEE SYSTEMS JOURNAL, SCI Journal, November 2020
IEEE ROBOTICS & AUTOMATION LETTERS (ICRA), Conference Paper (Full Text), November 2020
IEEE SYSTEMS JOURNAL, SCI Journal, August 2020
IEEE TRANSACTIONS ON AUTOMATION SCIENCE AND ENGINEERING, SCI Journal, May 2019
IEEE ROBOTICS & AUTOMATION MAGAZINE, SCI Journal, October 2018
IEEE TRANSACTIONS ON AUTOMATION SCIENCE AND ENGINEERING, SCI Journal, September 2018
CRC Press , Textbook Published by Renowned Publishing Houses, August 2018

Metrics

Publication: 14

Citation (WoS): 63

Citation (Scopus): 77

H-Index (WoS): 5

H-Index (Scopus): 5