Asst. Prof. SÜLEYMAN YILDIRIM

Personal Information

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International Researcher IDs
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Publons / Web Of Science ResearcherID: IXW-5480-2023
ScopusID: 57412287500
Yoksis Researcher ID: 413112

Biography

A dedicated and forward-thinking Aerospace Researcher with excellent project management abilities, capable of taking on a project from concept to completion. Demonstrates strong communication, analytical and organizational skills, reinforced by academic and international work experience. Enthused by integration, particularly aerospace and automation with a passion for staying up-to-date with the latest technological advancements to continuously improve operations. Exhibits exceptional skills in computer vision, machine learning and robotics with experience in Python, Tensorflow, Keras, PyTorch, NVIDIA Omniverse, NVIDIA Jetson, ROS, Gazebo, Unity, Blender and OpenCV.

A fluent English speaker who is career-minded and results-driven as confirmed by life achievements thus far. Highly skilled in designing and implementing electrical systems including power distribution, lighting, control systems, switchgears, breakers and relays. Able to develop and implement safety protocols and procedures to ensure the safe operation of industrial equipments. Possesses knowledge of containerisation technologies such as Docker and Kubernetes to deploy and manage applications in a portable and scalable way and proficiency in scripting languages such as Python, Bash and PowerShell to automate tasks. Able to configure and manage network infrastructure, implement and manage network protocols and services, monitor network performance and identify and resolve network issues using network management tools and techniques.

Education Information

Doctorate, Cranfield University, School of Aerospace, Transport and Manufacturing, Aerospace, England 2019 - 2024
Postgraduate, Cranfield University, School of Aerospace, Transport and Manufacturing, Computational and Software Techniques in Engineering, England 2018 - 2019
Undergraduate, Selcuk University, Faculty of Engineering, Electrical & Electronics Engineering, Turkey 2010 - 2014

Foreign Languages

English, C2 Mastery

Dissertations

Dissertations

Doctorate, Autonomous Ground Refuelling Framework of Civil Aircrafts using Computer Vision and Robotics, Cranfield University, School of Aerospace, Transport and Manufacturing, Aerospace, 2024

Postgraduate, Facial Expression Recognition using Computer Vision and Machine Learning: A Path to Deception Detection, Cranfield University, School of Aerospace, Transport and Manufacturing, Computational and Software Techniques in Engineering, 2019

Research Areas

Aeronautical Engineering, Sensors / Electrooptics Technologies, Flight Dynamics and Stability, Flight Control Systems, Avionics

Academic Titles / Tasks

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Aerospace Engineering, 2024 - Continues

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Enhancing Aircraft Safety through Advanced Engine Health Monitoring with Long Short-Term Memory**
Yildirim S., Rana Z. A.
SENSORS, vol.24, no.2, 2024 (SCI-Expanded)

II. **The influence of micro-expressions on deception detection**
Yildirim S., Chimeumanu M. S., Rana Z. A.
MULTIMEDIA TOOLS AND APPLICATIONS, vol.82, no.19, pp.29115-29133, 2023 (SCI-Expanded)

III. **Reducing the Reality Gap Using Hybrid Data for Real-Time Autonomous Operations**
Yildirim S., Rana Z. A.
MATHEMATICS, vol.11, no.7, 2023 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

I. **Development of Vision Guided Real-Time Trajectory Planning System for Autonomous Ground Refuelling Operations using Hybrid Dataset**
YILDIRIM S., Rana Z. A., Tang G.
AIAA SciTech Forum and Exposition, 2023, Florida, United States Of America, 23 - 27 January 2023

II. **Autonomous Ground Refuelling Approach for Civil Aircrafts using Computer Vision and Robotics**
Yildirim S., Rana Z., Tang G.
IEEE/AIAA 40th Digital Avionics Systems Conference (DASC), ELECTR NETWORK, 3 - 07 October 2021

Metrics

Publication: 5
Citation (WoS): 3
Citation (Scopus): 5
H-Index (WoS): 1
H-Index (Scopus): 1