

Res. Asst. Fatih KAYA



International Researcher IDs

Scholar: 3yxD_n0AAAAJ
ORCID: 0009-0000-0457-0834
WoS: LRC-3431-2024
Scopus: 59732187000

Personal Information

Email: kayafatih@uludag.edu.tr
Web (1): <https://avesis.uludag.edu.tr/kayafatih>
Web (2): <https://kayai.net>
Office Phone: +90 224 295 5289
Bursa Uludag University
Bursa, Türkiye

Education

Akdeniz University
Electrical-Electronics
Engineering
Bachelor's Degree
2018-2022
Antalya, Türkiye

Politechnika Czestochowska
Electrical-Electronics
Engineering
(6 Months, Erasmus+)
2021
Czestochowa, Poland

Bursa Uludag University
Computer Engineering
Master Degree(MSc)
2023-2026
Bursa, Türkiye

Bursa Uludag University
Computer Engineering
PhD
2026-Ongoing
Bursa, Türkiye

Research Areas

General Computer Science
Computer Graphics
Computer-Aided Design

Experience



SHANGHAI ELECTRIC GROUP CO., LTD.
I&C ENGINEER (Full-Time)
Dec 2022 - March 2023

After my graduation, I started to work as an instrumentation and control engineer at a 1320 MW thermal power plant, responsible for the continuous operation of field sensors and the direction of technical operations.



ADASTEC CORP.
PROJECT ENGINEER (Full-Time)
March 2023 – Jan 2024

I worked as a project engineer on the world's first mass-produced Level 4 autonomous bus, developed in collaboration with KARSAN & ADASTEC. I carried out promotional and marketing activities in Norway, where the bus is actively in service, and also conducted research and development work related to the vehicle.



BURSA ULUDAG UNIVERSITY
RESEARCH ASSISTANT (Full-Time)
Feb 2024 – On going

I joined the university as a research assistant starting from the second semester of my master's degree and I am still actively working here. Along with academic work, I assist with administrative tasks in the computer engineering department and teach the Data Structures laboratory course.

Academic Works

Articles

Asset Administration Shell Tool Comparison: A Case Study with Real Digital Twins Used in Petrochemical Industry

Kaya F., Şanlı E., Albayrak Ö., Ünal P., Kırıcı P.

Sensors , vol.25, no.7, 2025 (SCI-Expanded, Scopus)

Papers Presented at Peer-Reviewed Scientific Conferences

1. Real-Time Anomaly Detection in Industry 4.0 Using Asset Administration Shell

Kaya F., Ünal A., Albayrak Ö., Ünal P., Kırıcı P.

21st International Conference on Mobile Web and Intelligent Information Systems, MobiWIS 2025, İstanbul, Turkey, 11 - 13 August 2025, vol.16066 LNCS, pp.114-128,

2. Resilient Sensor Fusion via Hybrid Trust Mechanisms

Kaya F., Kırıcı P.

International conference on Next-Generation Engineering Technologies (ISNET 2025), Antalya, Turkey, 30 October - 01 November 2025, pp.55-57,

3. Opportunistic Wireless Charging for Urban EVs and Grid Effects

Kaya F., Kırıcı P.

International Conference on Science, Technology and Management in Energy, eNergetics 2025, Belgrade, Serbia, 24 - 25 November 2025, pp.235-240,

4. NLP-Based Query Interface for InfluxDB: Designing a Hybrid Architecture with SpaCy and Large Language Model

Kaya F., Kırıcı P.

International Conference on Advances in Electrical, Electronics, Energy, and Computer Sciences (ICEECS 2025), Skopje, Macedonia, 24 - 25 October 2025, pp.1-7,

5. Don't Stop to Charge, Charge Where You Stop: Wireless Charging in Traffic Flow

Kaya F., Kırıcı P.

Mediterranean Smart Cities Conference, MSCC 2025, Fas, Morocco, 13 - 15 October 2025, pp.1-7,

6. Implementing Monte Carlo Tree Search for Adaptive Traffic Light Control: A SUMO Based Study

Kaya F., Kırıcı P.

MEKON 2025 Uluslararası Katılımlı Öğrenci Konferansı , İstanbul, Turkey, 26 - 27 June 2025, pp.5-8,

7. Route Orchestrator: An Integrated Multi-Agent Path Finding Framework with Hybrid Path Conversion to SUMO

Kaya F., Kırıcı P.

2025 Innovations in Intelligent Systems and Applications Conference, ASYU 2025, Bursa, Turkey, 10 - 12 September 2025, no.27707946,