Lect. PhD ORKUN TEKE



Personal Information

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International Researcher IDs
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ScopusID: 58733450700
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Education

Doctorate, Iskenderun Technical University, Enerji Enstitüsü, Enerji Sistemleri Mühendisliği, Turkey 2019 - 2025
Postgraduate, Iskenderun Technical University, Fen Bilimleri Enstitüsü, Petrol ve Doğalgaz Mühendisliği , Turkey 2016 - 2018
Undergraduate, Dokuz Eylul University, Mühendislik Fakültesi, Jeofizik Mühendisliği Bölümü, Turkey 2007 - 2013

Foreign Languages

English

Dissertations

Doctorate, Rüzgar gücü tahmini için oluşturulan modellerin performans sonuçlarının analiz edilmesi, Iskenderun Technical University, 2024
Postgraduate, Jeotermal enerjide bütünleşik kaynak yönetimi ve reenjeksiyonun önemi, Iskenderun Technical University, 2018

Research Areas

Avesis Research Areas: Artificial Intelligence, Computer Learning and Pattern Recognition, Energy, Energy, Engineering and Technology
WoS Research Areas: Engineering Computing & Technology (Eng), Computer Science Artificial Intelligence, Computer Science Interdisciplinary Applications, Engineering Multidisciplinary
Scopus Research Areas: Media Technology, General Engineering, Computer Graphics and Computer-Aided Design, Artificial Intelligence

Academic Positions

Lecturer PhD, Manisa Celal Bayar University, MANİSA TEKNİK BİLİMLER MESLEK YÜKSEKOKULU, ELEKTRİK VE ENERJİ, 2020 - Present

Courses

Undergraduate

Bilgisayar Destekli Teknik Resim, Undergraduate, 2025 - 2026

Bilgisayar Destekli Teknik Resim, Undergraduate, 2024 - 2025

Associate Degree

Yapay Zeka, Associate Degree, 2024 - 2025

BİL 1104 Veri Yapıları, Associate Degree, 2021-2022

MMK 1020 Girişimcilik, Associate Degree, 2021-2022

BİL 1112 Nesne Tabanlı Programlama, Associate Degree, 2021-2022

EKT 1206 Girişimcilik, Associate Degree, 2021-2022

MMK 1102 Sosyal Sorumluluk, Associate Degree, 2021-2022

Makine Programı MYO 2000 İş yeri Uygulama Eğitimi, Associate Degree, 2021-2022, 2020-2021

İnşaat Teknolojisi Prog. MYO 2000 İş yeri Uygulama Eğitimi, Associate Degree, 2020-2021

MMK 1223 Kalite Güvence Ve Standartları, Associate Degree, 2020-2021

ITP 1113 İletişim ve Etik, Associate Degree, 2020-2021

CBU 2401 Girişimcilik, Associate Degree, 2020-2021

MRK 1211 Kalite Yönetimi, Associate Degree, 2020-2021

MTK 1111 Teknik ve Meslek Resmi, Associate Degree, 2020-2021

Articles

I. **Towards a hybrid future in energy: A social media sentiment analysis on wind energy and energy storage systems**
TEKE O.
International journal of energy studies (Online), vol.11, pp.2043-2058, 2026 (TRDizin)

II. **Enhancing ultra short-term wind power prediction accuracy with feature-based CNN-LSTM models: A comparative study**
Teke O., Depci T.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART A-JOURNAL OF POWER AND ENERGY, 2026 (SCI-Expanded, Scopus)

III. **Use of Advanced Optimization and Hybrid Deep Learning Models in Ultra-Short-Term Wind Energy Forecasting: The Case of Hatay, Türkiye**
TEKE O., DEPCİ T.
Journal of Information Systems and Management Research, vol.7, no.2, pp.214-229, 2025 (Peer-Reviewed Journal)

IV. **From Risk to Reality: Paradigm Shift in the Industry with VR Assisted Maneuver Training (ManeVRa)**
TEKE O., ÇAY F., Yargıcı D.
Bozok Journal of Engineering and Architecture, vol.4, no.2, pp.13-30, 2025 (Peer-Reviewed Journal)

V. **Bibliometric Analysis of Studies on "Machine Learning in Geothermal Energy"**
TEKE O.
Kastamonu Üniversitesi Mühendislik ve Bilim Dergisi, vol.11, no.2, pp.57-68, 2025 (Peer-Reviewed Journal)

VI. **Predicting clinical outcomes using 18F-FDG PET/CT-based radiomic features and machine learning algorithms in patients with esophageal cancer**
MÜTEVELİZADE G., Aydin N., Duran Can O., TEKE O., Suner A. F., ERDUĞAN M., Sayit E.
Nuclear Medicine Communications, vol.46, no.9, pp.835-847, 2025 (SCI-Expanded, Scopus)

VII. **Transforming University Life with Virtual Reality: Campus 2.0 – MetaCBU**

ÇUKURBAŞI B., GERİŞ A., TEKE O., KILINÇ M.
Celal Bayar Üniversitesi Fen Bilimleri Dergisi, vol.21, no.1, pp.50-59, 2025 (TRDizin)

VIII. **Yaratıcı Girişimcilikte Yapay Zeka Kullanımı: Bir SWOT ve TOWS Analizi**
Calp B., Teke O., Gençay S., Çubukcu A.
ÖNERİ, vol.20, no.MX Yaratıcı Endüstriler Çalıştayı 2024: Yapay Zeka Çağında Yaratıcı Endüstriler Özel Sayısı, pp.71-88, 2025 (TRDizin)

IX. **Balancing performance and comfort in virtual reality: A study of FPS, latency, and batch values**
GERİŞ A., ÇUKURBAŞI B., KILINÇ M., TEKE O.
Software - Practice and Experience, vol.54, no.12, pp.2336-2348, 2024 (SCI-Expanded, Scopus)

X. **Unlocking the Power of Artificial Intelligence: Building Digital Twins with Classification Algorithms for Optimized Geothermal Drilling**
TEKE O.
International Journal of Advanced Natural Sciences and Engineering Researches, vol.8, no.5, pp.52-59, 2024 (Peer-Reviewed Journal)

XI. **The Future of Smart Campuses: Combining Digital Twin and Green Metrics**
TEKE İ., TEKE O., KILINÇ M.
Acta Infologica, vol.7, no.2, pp.384-395, 2023 (ESCI)

XII. **Data Analysis of the Factors Related with Covid-19 Death Ratios: Cases in Spain, Italy, UK, Germany and Portugal**
TEKE O.
İleri Mühendislik Çalışmaları ve Teknolojileri Dergisi, 2020 (TRDizin)

XIII. **Geothermal energy and integrated resource management in Turkey**
Teke O., Yaşar E.
Geomechanics and Geophysics for Geo-Energy and Geo-Resources, vol.4, no.1, pp.1-10, 2018 (Scopus)

XIV. **"Assessment of Renewable Energy R&D Strategies of Turkey and World"**
TEKE O.
UCTEA Chamber of Machine Engineering's Engineer and Machine Journal, 2013 (TRDizin)

XV. **Current Situation of Renewable Energy and R&D Activities in Turkey**
TEKE O.
UCTEA Chamber of Machine Engineering's Engineer and Machine Journal, 2013 (TRDizin)

XVI. **"Green Energy and Technology Capacity of Turkey"**
TEKE O.
UCTEA Chamber of Geophysical Engineering's Geophysics Bulletin, 2013 (Peer-Reviewed Journal)

Books

I. **TÜRKİYE'DE DENİZÜSTÜ RÜZGAR ENERJİSİ SANTRALLERİ İÇİN YER SEÇİMİ: KRİTERLER, YÖNTEMLER VE ADAY BÖLGELER ÜZERİNE BİR DEĞERLENDİRME**
TEKE O.
in: MÜHENDISLIK ALANINDA ULUSLARARASI TEORI, ARAŞTIRMA VE DERLEMELER, BARDAK SELAHATTİN, Editor, Serüven Yayınevi, Ankara, pp.45-64, 2026

II. **ULTRA SHORT TERM WIND POWER FORECASTING WITH DEEP LEARNING ALGORITHMS: APPROACHES AND RESEARCH GAPS IN THE LITERATURE**
TEKE O., DEPCİ T.
in: International Academic Research and Studies in Engineering, ÖZALP COŞKUN, BARDAK SELAHATTİN, Editor, Serüven Yayınevi, Ankara, pp.59-80, 2025

III. **AI-Driven Smart Geothermal Systems: Optimizing Earth's Heat for a Sustainable Future**
TEKE O.
in: PIONEER AND INNOVATIVE STUDIES IN ENGINEERING, , Editor, ALL SCIENCES ACADEMY, pp.790-803, 2024

IV. **Engelli Bireyler İçin Tasarlanan Sanal Ortam Çalışmalarının Bibliyometrik Analizi**

KILINÇ M., TEKE O., ÇUKURBAŞI B., GERİŞ A.
in: Engelsiz Bilişim 2022: Teknoloji Işığında Yaşam, Kalaç M. Özhan, Tecim Vahap, Editor, Kriter Yayınevi, Manisa, pp.79-93, 2022

Papers Presented at Peer-Reviewed Scientific Conferences

I. **Hyperparameter Optimization with Optuna in Wind Energy Prediction Models Towards to More Accuracy**
TEKE O.
7th International Conference on Scientific and Innovative Studies ICSIS 2026, Konya, Turkey, 16 - 17 April 2026, (Full Text)

II. **Optimizing R&D Processes in Wind Energy Storage Systems: A Generative Artificial Intelligence (LLM) Supported Project Development Framework**
TEKE O.
8th International Conference on Scientific and Academic Research, Konya, Turkey, 26 - 27 February 2026, (Full Text)

III. **A GOVERNANCE MODEL FOR TRUSTWORTHY AI IN GEOTHERMAL ENERGY: A THEORETICAL FRAMEWORK FOR MODEL CONTEXT PROTOCOLS (MCP's)**
TEKE O.
CUMHURIYET 15TH INTERNATIONAL CONFERENCE ON APPLIED SCIENCES, Ankara, Turkey, 29 October 2025, (Full Text)

IV. **Büyük Dil Modelleri Gemini, DeepSeek ve ChatGPT' nin TYT Geometri Sorularındaki Performans Karşılaştırmaları**
TEKE O., TEKE E.
7. Uluslararası Türk Bilgisayar ve Matematik Eğitimi Kongresi, Antalya, Turkey, 14 November 2025, (Full Text)

V. **Türkiye's Climate Law as a Legal Transformation Tool: Reshaping Energy Dynamics**
TEKE O., DEPCİ T.
2nd International Conference on Pioneer and Academic Research ICPAR 2025, Konya, Turkey, 18 - 19 September 2025, (Full Text)

VI. **The Role of Artificial Intelligence Agents in Optimization and Control of Wind Energy Systems**
TEKE O.
6th International Conference on Engineering, Natural and Social Sciences ICENSOS 2025, Konya, Turkey, 10 - 11 August 2025, (Full Text)

VII. **The Role of Artificial Intelligence Agents in Optimization and Control of Geothermal Energy Systems**
TEKE O.
5th International Conference on Contemporary Academic Research, Konya, Turkey, 30 May 2025, (Full Text)

VIII. **A Conceptual Framework for the Use of Satellite-Based Image Processing Technologies in Hydroelectric Power Reservoir Management**
TEKE O.
2nd International Conference on Trends in Advanced Research ICTAR 2024, 15 - 16 June 2024, (Full Text)

IX. **INTEGRATING SUSTAINABILITY INTO UNIVERSITY CAMPUSES: A COMPREHENSIVE FRAMEWORK FOR ENVIRONMENTAL MANAGEMENT AND CONTINUOUS IMPROVEMENT**
TEKE O., GENÇAY S.
12th Global Conference on Global Warming (GCGW-2024), Şanlıurfa, Turkey, 16 - 19 May 2024, pp.366-369, (Full Text)

X. **ENHANCING WIND ENERGY EFFICIENCY IN TURKEY: INTEGRATING DIGITAL TWIN TECHNOLOGY FOR OPTIMIZED PERFORMANCE AND SUSTAINABILITY**
TEKE O., DEPCİ T.
12th Global Conference on Global Warming (GCGW-2024), Şanlıurfa, Turkey, 16 - 19 May 2024, pp.362-365, (Full Text)

XI. **Sanal Öğrenme Analitiği Aracı Olarak Isı Haritası Kavramsal Çerçevesi: MetaCBU Kampüs Örneği**
ÇUKURBAŞI B., KILINÇ M., GERİŞ A., TEKE O., KALAÇ M. Ö.
11. Uluslararası Eğitim Programları ve Öğretim Kongresi, Aydın, Turkey, 26 - 28 October 2023, vol.1, pp.671-676, (Summary Text)

XII. **The Future of Smart Campuses: Combining Digital Twin and GreenMetrics**
TEKE İ., TEKE O., KILINÇ M.
10th International Management Information Systems Conference, İstanbul, Turkey, 18 - 20 October 2023, (Full Text)

XIII. **Yükseköğretim Düzeyi Sanal Gerçeklik Ortamlarında İşitme ve Fiziksel Engelli Öğrencilerin Kütüphane Erişimi Hakkında Bir Değerlendirme**
GERİŞ A., KILINÇ M., TEKE O., ÇUKURBAŞI B.
BİLTEVT 2023: Uluslararası Engelsiz Bilişim 2023 Kongresi, Eskişehir, Turkey, 20 - 22 September 2023, pp.32-33, (Summary Text)

XIV. **Yükseköğretimde Sanal Gerçeklik Destekli Uzaktan Öğrenme Ortamlarında İşitme Engelli Öğrencilere Uygun Geri Bildirim Sistemleri**
TEKE O., KILINÇ M., GERİŞ A., ÇUKURBAŞI B.
BİLTEVT 2023: Uluslararası Engelsiz Bilişim 2023 Kongresi, Eskişehir, Turkey, 20 - 22 September 2023, pp.52-53, (Summary Text)

XV. **Predictive Maintenance in Maritime Logistics: A Machine Learning Approach**
TEKE O., DEPCİ T.
I. International Maritime and Logistics Congress, Zonguldak, Turkey, 22 September 2023, (Full Text)

XVI. **MetaPortal: Business Intelligence and Machine Learning Approach for VR Data**
KILINÇ M., GERİŞ A., TEKE O., ÇUKURBAŞI B.
2023 Innovations in Intelligent Systems and Applications Conference, ASYU 2023, Sivas, Turkey, 11 - 13 October 2023, (Full Text)

XVII. **Factors Influencing the Learner's Cognitive Engagement in a Language MOOC: Feature Selection Approach**
KILINÇ M., TEKE O., Ozan Özarslan Ö., Özarslan Y.
2023 Innovations in Intelligent Systems and Applications Conference, ASYU 2023, Sivas, Turkey, 11 - 13 October 2023, (Full Text)

XVIII. **Engelli Bireyler için Tasarlanan Sanal Ortam Çalışmalarının Bibliyometrik Analizi**
KILINÇ M., TEKE O., ÇUKURBAŞI B., GERİŞ A.
BİLTEVT 2022: Uluslararası Engelsiz Bilişim 2022 Kongresi, Manisa, Turkey, 22 - 24 September 2022, pp.49-50, (Summary Text)

XIX. **Mathematical Background of Neural Networks As a Deep Learning Algorithm**
TEKE O., DEPCİ T.
International Turkish Math and Computer Education Symposium, Antalya, Turkey, 28 November 2021, (Summary Text)

XX. **GeoGebra for Stream: COVID-19 Virus Spreading Case**
ÖĞÜT M. N., TEKE O.
Uluslararası Türk Enerji Birliği Kongresi, Antalya, Turkey, 28 November 2021, (Full Text)

XXI. **DERİN ÖĞRENME ALGORTİMALARINDAN OLAN YAPAY SİNİR AĞLARI' NIN MATEMATİKSEL ALTYAPISI**
TEKE O., DEPCİ T.
5. Uluslararası Türkiye Bilgisayar ve Matematik Eğitimi Sempozyumu, Turkey, 28 - 29 September 2021, (Full Text)

XXII. **"Güncel İklim Verileri Işığında Türkiye'de Mevcut Durum ve Gelecek"**
TEKE O.
Uluslararası Türk Enerji Birliği Kongresi, Ankara, Turkey, 29 March 2021, (Summary Text)

XXIII. **Bütünleşik Kaynak Yönetimi Anlayışının Jeotermal Enerji İçin Önemi**
TEKE O., YAŞAR E.
Uluslararası Türk Enerji Birliği Kongresi, Ankara, Turkey, 29 March 2021, (Summary Text)

XXIV. **“Artficial Intelligence and Games”**
TEKE O., DEPCİ T.
International Artificial Intelligence Conference Towards To Industry 4.0, Hatay, Turkey, 14 November 2020, (Full Text)

XXV. **“Mathematical Background of Artificial Neural Networks**
TEKE O., DEPCİ T.
International Artificial Intelligence Conference Towards To Industry 4.0, Hatay, Turkey, 14 November 2020, (Full Text)

XXVI. **“Center of Petroleum, Renewable Energy and Carbon Foot Print Triangular Turkey”**
TEKE O.
19th International Petroleum and Natural Gas Congress and Exhibition, Ankara, Turkey, 15 May 2013, (Summary Text)

Funded Projects

Gençay S., Demir A., Teke O., Özyüksel Çiftçioğlu A., Altıntaş V., Özkan E., TUBITAK Project, 3501 - National Young Researcher Career Development Program, YAPAY ZEKA DESTEKLİ DEPREM PERFORMANS DEĞERLENDİRME MODELİ, 2026 - 2029

Teke O., Gençay S., Project Supported by Other Official Institutions, Üretken Yapay Zeka Temelli Karar Destek Sistemi Prototipi Oluşturulması, 2026 - 2026

Teke O., Project Supported by Other Private Institutions, GuardOne: Güvenlik Cihazlarının Tek Bir Merkezden Yönetilmesini Sağlamaya Yönelik Yapay Zeka Destekli Platform Oluşturulması, 2025 - 2026

GERİŞ A., YOLDAŞ C., KAYIR G., TEKE O., Promoting Green Skills in Energy Generation Sector in Turkey - Notos (2024.010002), 2024 - 2025

Geriş A., Çukurbaşı B., Teke O., KOSGEB, Sanal Gerçeklik ve Yapay Zeka Temelli Metaverse Ürünlerinin Geliştirilmesi: MetaCampus Örneği, 2023 - 2025

GERİŞ A., KILINÇ M., TEKE O., ÇUKURBAŞI B., Project Supported by Higher Education Institutions, Sanal Gerçeklik Destekli Manisa Celal Bayar Üniversitesi Sanal Kampüsü'nün (Metacbu) Geliştirilmesi ve Öğrenme Faaliyetleri Sırasında Katılımcılar Üzerindeki Etkilerinin İncelenmesi, 2022 - 2024

TEKE O., TUBITAK Project, TUBITAK 4007- Teknouzay- 3, 2021 - 2021

KARACA D., UYGUR E., TEKE O., ÖĞÜT M. N., STREAM It Up!, 2021 - 2022

CANBULA D., FİAT VAROL S., ŞAHİNOĞLU A., ŞAHİN C. A., TEKE O., KANAT Y., Project Supported by Higher Education Institutions, Güneş-Hidrojen Hibrit Enerji Sistemlerinin Verimlilik Analizleri ve Mikro Rüzgar Türbinlerinin Farklı Yükler Altında Çalıştırarak Oluşan Hız, Titreşim ve Ses Analizlerinin Yapılması, 2020 - 2021

TEKE O., TUBITAK Project, 4007- Teknouzay Bilim Şenliği, 2019 - 2019

Peer Reviews in Scientific Publications

INTERNATIONAL JOURNAL OF ENERGY RESEARCH, National Scientific Refreed Journal, October 2026

WIND ENGINEERING, Journal Indexed in ESCI, September 2026

INTERNATIONAL JOURNAL OF GREEN ENERGY, Journal Indexed in SCI-E, April 2026

INTERNATIONAL JOURNAL OF GREEN ENERGY, Journal Indexed in SCI-E, March 2026

Bilecik Şeyh Edebali Üniversitesi Fen Bilimleri Dergisi, National Scientific Refreed Journal, March 2026

WIND ENGINEERING, Journal Indexed in ESCI, February 2026

JOURNAL OF METAVERSE, Journal Indexed in ESCI, October 2025

WIND ENGINEERING, Journal Indexed in ESCI, May 2025

WIND ENGINEERING, Journal Indexed in ESCI, May 2025

Metrics

Publication: 46
Citation (WoS): 33
Citation (Scopus): 51
H-Index (WoS): 2
H-Index (Scopus): 3

Non Academic Experience

HATAY BÜYÜKŞEHİR BELEDİYESİ SU VE KANALİZASYON İDARESİ, Jeofizik Mühendisi
Briza Renewables, İş Geliştirme Mühendisi