



ALI SABED AL-SAILAWI

علي صباح عبد السيلوي

Lecturer

PROFILE

Dr. Ali's work focuses on developing intelligent systems and applying advanced analytics to solve complex challenges. His expertise spans the design and implementation of robust database systems, the exploration of novel data mining techniques, and the development of cutting-edge machine learning algorithms for a wide range of applications.

ACADEMIC TITLES

2024-07-09 Lecturer

TEACHING EXPERIENCE

Lecturer
University of Misan
2010-08 - Present

COURSES

- Logic Design
- Computer 1

PUBLICATIONS (21)

- An explainable and uncertainty-aware machine-learning framework for cross-study prediction and optimization of methane yield in anaerobic digestion
Bioresource Technology Reports, 102898, 2026 | 2026 | Cited: 1
- A Physics-Informed Neural Network Framework for Modeling and Optimization of Biomass–Plastic Co-Pyrolysis Systems
BioEnergy Research 19 (1), 121, 2026 | 2026
- Optimized performance evaluation of a hybrid renewable energy system (photovoltaic–wind–diesel) using HOMER software
Journal of Renewable and Sustainable Energy 18 (2), 2026 | 2026 | Cited: 4
- Integration Value Engineering and Quality of Maintenance and its Impact on Product Quality Improvement: Field Research at Electrical and Electronic Industry Companies in Baghdad
ESTIDAMAA 2026, 1-15, 2026 | 2026
- AI-Assisted Optimization of a Hybrid Renewable Energy System for Semi-Arid Regions Using Multi-Source Engineering Data
Energy 360, 100070, 2026 | 2026 | Cited: 2
- Ai-augmented prediction and optimization of thermal performance in PCM-integrated concrete roofs for desert buildings
Energy and Buildings, 117389, 2026 | 2026 | Cited: 1
- Multi-Objective Optimization of Hybrid MSF–RO Desalination Systems under Dynamic Operating Conditions Using Thermodynamics-Guided Surrogate-Assisted Reinforcement Learning
Chemical Engineering Research and Design | 2026

CONTACT

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EDUCATION

Doctorate (2024-06-15)
Data Mining and Machine Learning
Iran University of Science and Technology

RESEARCH METRICS

h-index (Scopus)	6
h-index (GS)	6
Citations (Scopus)	91
Citations (GS)	120
Documents (Scopus)	15
Documents (GS)	18

RESEARCH INTERESTS

- Artificial Intelligence
- Machine Learning
- Data Science
- Data Mining
- Optimization Algorithms
- Applied AI



8. **The Future of Virology Diagnostics Using Wearable Devices Driven by Artificial Intelligence**
Optimization, Machine Learning, and Fuzzy Logic: Theory, Algorithms, and ... , 2025 | 2025 | Cited: 2
9. **Optimized multi-generation system for sustainable desalination and power production using solar-driven Multi-Effect Distillation (MED) in Basra, Iraq**
Energy for Sustainable Development 85 (101684), 2025 | 2025 | Cited: 23
10. **Advanced Optimization Techniques Using Artificial Intelligence Algorithms for Thermal Efficiency Estimation of Photovoltaic Thermal Systems**
Process Integration and Optimization for Sustainability, 2025 | 2025 | Cited: 14
11. **Machine learning-enhanced optimization of exhaust gas recirculation strategies for superior diesel engine performance and emissions control: A synergistic experimental and ...**
International Journal of Hydrogen Energy 169, 151184, 2025 | 2025 | Cited: 20
12. **Blockchain and Deep Q-Learning for Trusted Cloud-Enabled Drone Network in Smart Forestry: A Survey**
Babylonian Journal of Networking 2025, 207-241, 2025 | 2025 | Cited: 3
13. **Machine learning-enhanced optimization of exhaust gas recirculation strategies for superior diesel engine performance and emissions control: A synergistic experimental and computational study**
International Journal of Hydrogen Energy | 2025
14. **Machine learning-optimized solar thermal pretreatment and low-energy ultrasonic disintegration for enhanced biogas production: Efficiency, carbon footprint, and comparative analysis**
Next Energy | 2025
15. **Exploring the Impact of Blockchain Revolution on the Healthcare Ecosystem: A Critical Review**
Mesopotamian Journal of Cybersecurity 5 (1), 78-89, 2025 | 2025 | Cited: 15
16. **Sensitivity analysis and optimization of PEMFCs for realistic dynamic operating conditions**
Journal of Power Sources 659, 238335, 2025 | 2025 | Cited: 14
17. **An Efficient Study Comparing the Measure of Spatiotemporal Gait Parameters Between Smartphone and Insole Sensors**
ARCHIVES DES SCIENCES 75 (1), 1-7, 2025 | 2025
18. **Machine learning-optimized solar thermal pretreatment and low-energy ultrasonic disintegration for enhanced biogas production: Efficiency, carbon footprint, and comparative ...**
Next Energy 9, 100435, 2025 | 2025 | Cited: 6
19. **Utilizing AI for extracting insights on post WHO's COVID-19 vaccination declaration from X (Twitter) social network**
AIMS Public Health | 2024 | Cited: 9
20. **Analyzing Social Media Data to Understand Long-Term Crisis Management Challenges of COVID-19**
Fusion: Practice and Applications | 2024 | Cited: 6
21. **Analyzing the use of social media data to understand long-term crisis management challenges of COVID-19**
Fusion Pract. Appl 14, 227-243, 2023 | 2023 | Cited: 6