



Fallah H Najjar

فلاح حسن نعمة سلمان نجار

Assistant Professor

PROFILE

Fallah H. Najjar was born in Iraq in 1985. He received his diploma in Computer Systems Techniques from Al-Furat Al-Awsat Technical University, Technical Institute of Najaf, in 2011; his B.Sc. degree in Software Engineering from Al-Imam Ja'afar Al-Sadiq University in 2015; and his M.Sc. degree in Computer Science from the University of Kufa in 2019. Also, he holds a Ph.D. in Computer Science from UTM, Malaysia. His research interests are AI, deep learning, machine learning, medical imaging, image processing, computer vision, and data science.

ACADEMIC TITLES

2019-10-10	Assistant Lecturer
2022-10-11	Lecturer
2025-10-26	Assistant Professor

TEACHING EXPERIENCE

Assistant Professor
Al-Furat Al-Awsat Technical University
2025-10 - Present

Lecturer
Al-Furat Al-Awsat Technical University
2023-10 - 2025-10

Assistant Lecturer
Al-Furat Al-Awsat Technical University
2019-10 - 2022-10

COURSES

- Digital Image Processing (CS401)

ADMINISTRATIVE POSITIONS

2019-06-19 - 2022-03-01	Assistant Head of Department - Department of Information Technology - Technical College of Management / Kufa
2022-10-01 - 2023-07-17	Assistant Head of Department - Department of Computer Systems Technologies - Technical Institute of Najaf

PUBLICATIONS (4 6)

- Dual Focus Attention Block UNet (DFAB-UNet) for Robust Skin Lesion Segmentation, DFAB-UNT
نزع جنتافألايد لجلأة قديبة يلاعە يقوئوموة قنأفماد ختساب
Baghdad Science Journal | 2026

CONTACT

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EDUCATION

بكلوريوس (20-09-2015)
Software Engineering
Imam Jaafar AlSadiq University

ماجستير (16-05-2019)
Computer Science
University of Kufa

دكتوراه (21-07-2026)
Artificial intelligence / Image processing
Universiti Teknologi Malaysia

RESEARCH METRICS

h-index (Scopus)	10
h-index (GS)	11
Citations (Scopus)	290
Citations (GS)	369
Documents (Scopus)	36
Documents (GS)	41

PATENTS

- AI BASED SMART PEN FOR CONVERTING TEXT INTO SPEECH

RESEARCH INTERESTS

- Artificial Intelligence
- Digital Image Processing
- Medical Image Processing
- Medical Image Analysis
- Machine Learning
- Deep Learning
- Feature Extraction



2. **Neutro-Fuzzy Attention EfficientNet (NFAE-Net) for White Blood Cell Images Classification**
International Journal of Robotics and Control Systems 6 (3), 2026 | 2026
3. **Dual Focus Attention Block UNet (DFAB-UNet) for Robust Skin Lesion Segmentation**
Baghdad Science Journal 23 (3), 1100-1115, 2026 | 2026
4. **Explainable Reinforcement Learning-Based Adaptive Soft Switching Hybrid FSO/RF Communication Systems Under Dynamic Weather Conditions**
International Journal of Robotics and Control Systems 6 (5), 2026 | 2026
5. **Lightweight Hybrid Feature Extraction for Real-Time Skin Lesion Classification on HAM10000 and MSK10000**
Journal of Robotics and Control (JRC) 7 (3), 3724-3734, 2026 | 2026
6. **Cross-Scale Feature Learning for Alzheimer's Disease Detection via Hybrid Deep Networks**
Baghdad Science Journal 23 (5), 1779-1794, 2026 | 2026
7. **NexaNet: Multi-Scale Residual Learning with Cross-Path Downsampling and Channel Attention for Sacroiliac Joint MRI Classification**
International Journal of Robotics and Control Systems 6 (4), 2799-2819, 2026 | 2026
8. **Resolution of Expression of Concern: A Lightweight U-Net Model for Accurate Skin Lesion Segmentation**
Iraqi Journal for Computer Science and Mathematics 7 (2), 2, 2026 | 2026
9. **An Overview of Artificial Intelligence Based Skin Lesion Analysis for Dermatologists**
2025 IEEE International Conference on Computing (ICOCO), 349-354, 2025 | 2025
10. **Integrating Spatial Pyramid Pooling for Multi-scale Brain Tumor Classification in Deep Learning**
Journal of Image and Graphics 13 (4), 2025 | 2025 | Cited: 5
11. **Accurate Skin Lesion Segmentation through Feature Fusion in Dermoscopy Images**
Baghdad Science Journal 22 (8), 2824-2837, 2025 | 2025 | Cited: 3
12. **Acute Lymphoblastic Leukemia Classification Using Modified VGG16 Architecture**
Iraqi Journal of Science, 5159-5167, 2025 | 2025 | Cited: 1
13. **Transformer-aided skin cancer classification using VGG19-based feature encoding**
Scientific Reports 15 (1), 40204, 2025 | 2025 | Cited: 16
14. **A Lightweight U-Net Model for Accurate Skin Lesion Segmentation**
Iraqi Journal for Computer Science and Mathematics 6 (2), 1, 2025 | 2025 | Cited: 7
15. **Hybrid Deep Learning Model for Hippocampal Localization in Alzheimer's Diagnosis Using U-Net and VGG16**
International Journal of Robotics and Control Systems | 2025 | Cited: 8
16. **Brain Rot Dataset ...**
2025
17. **Hybrid SVD and SURF-Based Framework for Robust Image Forgery Detection and Object Localization**
Journal of Robotics and Control (JRC) 6 (2), 535-542, 2025 | 2025 | Cited: 6
18. **SacroMRI Dataset ...**
2025
19. **Integrating Multi-scale Feature Extraction into EfficientNet for Acute Lymphoblastic Leukemia Classification**
Journal of Image and Graphics 13 (1), 83-89, 2025 | 2025 | Cited: 9
20. **A Morphological Context Blocks Hybrid CNN for Efficient Acute Lymphoblastic Leukemia Classification**
International Journal of Robotics and Control Systems 5 (2), 1102-1119, 2025 | 2025 | Cited: 7
21. **Hybrid and Deep Learning Models for Telecom Churn Forecasting: A Comparative Evaluation**
2025 IEEE International Conference on Computing (ICOCO), 7-11, 2025 | 2025
22. **Diagnosing Alzheimer's Disease Severity: A Comparative Study of Deep Learning Algorithms**
BIO Web of Conferences | 2024 | Cited: 5
23. **Early Diagnose Alzheimer's Disease by Convolution Neural Network-based Histogram Features Extracting and Canny Edge**
Baghdad Science Journal 21 (2 (SI)), 0643-0643, 2024 | 2024 | Cited: 13

24. **Ant Colony Optimization Based Edge Detection Algorithm**
Al-Furat Journal of Innovations in Electronics and Computer Engineering, 479-487, 2024 | 2024 | Cited: 1
25. **Secure Image Encryption using E-Fractal-Based Non-Commutative Group and Hash Function**
BIO Web of Conferences 97, 00020, 2024 | 2024 | Cited: 2
26. **Early Diagnose Alzheimer's Disease by Convolution Neural Networkbased Histogram Features Extracting and Canny Edge**
BAGHDAD SCIENCE JOURNAL | 2024
27. **Localizing the Thickness of Cortical Regions to Descriptor the Vital Factors for Alzheimer's Disease Using UNET Deep Learning**
BIO Web of Conferences | 2024 | Cited: 3
28. **A Developed Polar Coded Generalized Frequency Division Multiplexing Based on Bit-Interleaved Coded Modulation**
Al-Furat Journal of Innovations in Electronics and Computer Engineering 3 (2 ...), 2024 | 2024 | Cited: 2
29. **A novel color feature for the improvement of pigment spot extraction in iris images**
Journal of Image and Graphics 12 (4), 2024 | 2024 | Cited: 4
30. **Image Enhancement Using HSV Color Space, DWT, and BiHE Techniques**
2023 6th International Conference on Engineering Technology and its ..., 2023 | 2023 | Cited: 5
31. **Melanoma skin cancer classification based on CNN deep learning algorithms**
Malaysian Journal of Fundamental and Applied Sciences 19 (3), 299-305, 2023 | 2023 | Cited: 77
32. **Eye Diseases Classification Based on Hybrid Feature Extraction Methods**
2023 6th International Conference on Engineering Technology and its ..., 2023 | 2023 | Cited: 5
33. **Design a Crime Detection System based Fog Computing and IoT**
Malaysian Journal of Fundamental and Applied Sciences 19 (3), 345-354, 2023 | 2023 | Cited: 11
34. **A novel medical image enhancement technique based on hybrid method**
Journal of Physics: Conference Series 2432 (1), 012021, 2023 | 2023 | Cited: 30
35. **RETRACTED: Retinal blood vessel segmentation based on the gabor filter and optimized top-hat morphology**
AIP Conference Proceedings 2977 (1), 020113, 2023 | 2023 | Cited: 1
36. **Retinal blood vessel segmentation based on the gabor filter and optimized top-hat morphology**
AIP Conference Proceedings | 2023
37. **Leukemia classification using a convolutional neural network of AML images**
Malaysian Journal of Fundamental and Applied Sciences 19 (3), 306-312, 2023 | 2023 | Cited: 32
38. **Acute lymphoblastic leukemia image segmentation based on modified HSV model**
Journal of Physics: Conference Series 2432 (1), 012020, 2023 | 2023 | Cited: 18
39. **Coronavirus Classification based on Enhanced X-ray Images and Deep Learning**
Malaysian Journal of Fundamental and Applied Sciences 19 (3), 369-378, 2023 | 2023 | Cited: 11
40. **Detection of COVID-19 in X-Rays by convolutional neural networks**
Iraqi Journal of Science, 1963-1974, 2023 | 2023 | Cited: 11
41. **Classification of COVID-19 from X-ray Images using GLCM Features and Machine Learning**
Malaysian Journal of Fundamental and Applied Sciences 19 (3), 389-398, 2023 | 2023 | Cited: 20
42. **Soft edge detection by mamdani fuzzy inference of color image**
2022 5th International Conference on Engineering Technology and its ..., 2022 | 2022 | Cited: 7
43. **Histogram features extraction for edge detection approach**
2022 5th International Conference on Engineering Technology and its ..., 2022 | 2022 | Cited: 12
44. **A novel hybrid feature extraction method using LTP, TFCM, and GLCM**
journal of physics: conference series 1892 (1), 012018, 2021 | 2021 | Cited: 16
45. **Digital filters windowing for data transmission enhancement in communication channel**
Indonesian Journal of Electrical Engineering and Computer Science 24 (3 ...), 2021 | 2021 | Cited: 11
46. **Integrating the kernel method to autonomous learning multi-model systems for online data**
2018 International Conference on Artificial Intelligence and Data Processing ..., 2018 | 2018 | Cited: 10