

Manaf Kadum Husseain Mohammed Ali Altaleb

منا ف كاظم حسين محمد علي الطالب

Assistant Professor

CONTACT

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EDUCATION

Doctorate (2018-01-07)
Electrical and Electronic Engineering
Glasgow University

RESEARCH METRICS

h-index (Scopus)	6
h-index (GS)	7
Citations (Scopus)	175
Citations (GS)	273
Documents (Scopus)	15
Documents (GS)	38

AWARDS

• Medal of Honor for Iraqi Researchers in the United Kingdom

PATENTS

• Design and implementation of a device to support and close the lazy eyelid, relying on the healthy side of the face.

RESEARCH INTERESTS

• research focused on the development and clinical testing of portable, patient-managed brain-computer interfaces (BCIs) and functional electrical stimulation for home-based stroke and spinal cord injury rehabilitation

PROFILE

Dr. Manaf Kadhum Hussein Al-Taleb is an Assistant Professor in the Department of Electrical Engineering at the College of Engineering, University of Wasit, Iraq. He received his PhD from the University of Glasgow, UK, for his research on the development and clinical evaluation of home-based brain–computer interfaces for neurofeedback and rehabilitation.
His research interests span brain–computer interfaces (BCIs), neurofeedback (NF), functional electrical stimulation (FES), biomedical signal processing, artificial intelligence (AI), and neurorehabilitation. He also focuses on the design and development of intelligent data acquisition (DAQ) and measurement systems for the acquisition, processing, and analysis of biomedical signals, with applications in healthcare, rehabilitation, and Internet of Things (IoT) systems.

ACADEMIC TITLES

2022-11-02	Assistant Professor

ADMINISTRATIVE POSITIONS

2018-11-11 - 2023-11-11	Head of Electrical Engineering Department
2023-07-22 - 2026-08-31	Head of the Engineering Consulting Office
2011-06-01 - 2012-10-01	Head of Civil Engineering Department
2019-01-01 - 2021-12-01	Council – Secretary of the College of Engineering

INTERNATIONAL MEMBERSHIPS

• Iraqi Engineers Union

PUBLICATIONS (39)

1. **Development and experimental validation of a low-cost sensor system for structural health monitoring applications**
   http://www.diagnostyka.net.pl/, https://doi.org/10.29354/diag/236890, 2026 | 2026
2. **A Cost-Effective Sensor System for Structural Health Monitoring: Design and Experimental Evaluation**
   Wasit Journal of Engineering Sciences 14 (3), 167-182, 2026 | 2026
3. **AN APPRAISAL OF THE NONINVASIVE ELECTROENCEPHALOGRAPHY PRODUCTION AND MARKETING**
   Journal of Engineering Science and Technology 21 (3), 2026 | 2026
4. **Design and Implementation of an Electroencephalography System for Emotion Recognition**
   Wasit Journal of Engineering Sciences 14 (1), 51-63, 2026 | 2026
5. **Streetscape Evaluation Using Deep Learning in Light of Local Biases**
   Wasit Journal of Engineering Sciences 14 (2), 477-486, 2026 | 2026
6. **Advancements in Sustainability Systems II**
   https://doi.org/10.52305/LGXP1720 3, 285 Pages, 2025 | 2025

7. **IOT System for Detecting Epileptic Seizures Based on Fuzzy Logic**
Wasit Journal of Engineering Sciences 13 (2), 78-90, 2025 | 2025

8. **Implementation and derivation kinematics modeling analysis of WidowX 250 6Degreef of freedom robotic arm**
Journal of Engineering and Sustainable Development 29 (4), 473-484, 2025 | 2025 | Cited: 11

9. **Visualizing kinematics: Investigating the impact of altered joint angles on end-effector position and orientation using Rviz and WidowX250-6DOF**
Wasit Journal of Engineering Sciences 12 (2), 1-14, 2024 | 2024 | Cited: 3

10. **A review of energy harvesting techniques for self-powered IoT devices**
Wasit Journal of Engineering Sciences 12 (4), 133-145, 2024 | 2024 | Cited: 8

11. **Upgrading sustainable pipeline monitoring with piezoelectric energy harvesting**
Processes 12 (10), 2199, 2024 | 2024 | Cited: 5

12. **COVID-19 Detection Using Fusion-Based Deep Learning Models**
2023 Second International Conference on Advanced Computer Applications (ACA ..., 2023 | 2023

13. **Evaluation of SVM performance in the detection of Covid-19 by analyzing lung images in marked CT scan dataset**
2ND INTERNATIONAL CONFERENCE ON ENGINEERING AND ADVANCED TECHNOLOGY:(ICEAT ..., 2023 | 2023

14. **Eye blink detection using electrooculography based on support vector machine**
2ND INTERNATIONAL CONFERENCE ON ENGINEERING AND ADVANCED TECHNOLOGY:(ICEAT ..., 2023 | 2023 | Cited: 1

15. **COVID-19 detection using machine learning and fusion-based deep learning models**
Wasit Journal of Engineering Sciences 11 (2), 12-23, 2023 | 2023 | Cited: 1

16. **Comparison of various machine learning regression models based on Human age prediction**
Wasit Journal of Engineering Sciences 10 (3), 1-16, 2022 | 2022 | Cited: 1

17. **Measuring The Fatigue of Persons Based on EOG Signal Processing Mmethods**
2022 5th International Conference on Engineering Technology and its ..., 2022 | 2022 | Cited: 7

18. **Remote monitoring of oil pipelines' cathodic protection system via GSM/GPRS modem and the thingspeak platform**
Diagnostyka 23 (3), 2022 | 2022 | Cited: 7

19. **Development of low-cost biosignal acquisition system for ECG, EMG, and EOG**
Wasit Journal of Engineering Sciences 10 (3), 191-202, 2022 | 2022 | Cited: 5

20. **On the way home: A BCI-FES hand therapy self-managed by sub-acute SCI participants and their caregivers: A usability study**
Journal of NeuroEngineering and Rehabilitation 18 (1), 1-18, 2021 | 2021 | Cited: 62

21. **neuromodulatory interventions for pain**
Frontiers in Neuroscience 15, 746328, 2021 | 2021 | Cited: 3

22. **A Low-Cost Real-Time Monitoring System for the River Level in Wasit Province**
ICASEA 2021 - 3rd 2021 International Conference on Advance of Sustainable Engineering and its Application | 2021

23. **Diagnosing of air compressor faults using frequency data driven approach**
2021 International Conference on Advance of Sustainable Engineering and its ..., 2021 | 2021 | Cited: 2

24. **Brain–computer interface controlled functional electrical stimulation for rehabilitation of hand function in people with spinal cord injury**
Neuroprosthetics and Brain-Computer Interfaces in Spinal Cord Injury, 281-305, 2021 | 2021 | Cited: 9

25. **Home used, patient self-managed, brain-computer interface for the management of central neuropathic pain post spinal cord injury: usability study**
Journal of neuroengineering and rehabilitation 16 (1), 128, 2019 | 2019 | Cited: 70

26. **Intensive Care Society State of the Art**
Journal of the Intensive Care Society 20 (2_Supplement 1), 253, 2019 | 2019 | Cited: 3

27. **EEG correlates of self-managed neurofeedback treatment of central neuropathic pain in chronic spinal cord injury**
Frontiers in Neuroscience 13, 762, 2019 | 2019 | Cited: 69

28. **Development and clinical testing of home-based brain-computer interfaces for neurofeedback and for rehabilitation**
University of Glasgow, 2018 | 2018 | Cited: 3

29. **Patient feedback on self-managed brain computer interface treatment of central neuropathic pain in spinal cord injury: Steps towards service design**
7th International BCI Meeting, Pacific Grove, CA, 21-25, 2018 | 2018 | Cited: 2

30. **Home Used, Patient Self-Managed, Brain-Computer Interface for Treatment of Central Neuropathic Pain in Spinal Cord Injury: Feasibility Study**
2017

31. **Feasibility Study of Brain Computer Interface Controlled Functional Electrical Stimulation for Rehabilitation of Hand in Tetraplegic Patients in Home Environment**
2017

32. **Home-Based Rehabilitation System Using Portable Brain-Computer Interface and Functional Electrical Stimulation**
Proceedings of the 6th International Brain-Computer Interface Meeting ..., 2016 | 2016 | Cited: 5

33. **Home Based Neurofeedback Treatment of Central Neuropathic Pain: a Feasibility Study**
2016

34. **Portable Brain-Computer Interface for Home-Based Neurorehabilitation**
2015

35. **Portable Brain-Computer Interface and Functional Electrical Stimulation for Rehabilitation of Hand Function**
2015

36. **Portable brain computer interface and functional electrical stimulation for home-based sensorimotor training**
IFESS, 2015 | 2015 | Cited: 1

37. **Portable Brain-Computer Interface Using Serious Game for Home-Based Neurofeedback Training**
2015

38. **PATTERN SYNTHEISS OF LINEAR PHASE ARRAY USING ARTIFICIAL NEAURAL NETWORK BASED ON PARTICLE SWARM OPTIMIZATION**
Kufa Journal of Engineering 5 (1), 71-84, 2013 | 2013

39. **A Comprehensive Study of Kinematic Analysis for Widowx250-6dof Robotic Arm**
Available at SSRN 4477839, 0 | 0