



# Mohammed A. Fadhel

## Scientific Degree

Assistant Professor

## Experience

### **2011–2012**

Operator • Engineer • STX Korean company, Karbala, Iraq

### **2013–2014**

Work as a data entry (6 months) for the Independent Electoral Commission, as well as work as a technical supervisor for the maintenance of election equipment on voting day.

### **2017–2020**

Assist Lecturer • Student Activities Division • University of Information Technology and Communication, Baghdad, Iraq

### **2021–2022**

Lecturer • Quality Assurance and Performance Evaluation Division • University of Sumer, Thi-Qar, Iraq

Lecturer • Scientific Affairs Division • University of Sumer, Thi-Qar, Iraq

### **2023–2024**

Head Department of Computer Information Systems • College of Computer Science and Information Technology • University of Sumer, Thi-Qar, Iraq

### **2025- Now**

Head Department of Intelligent Medical Systems • College of Computer Science and Information Technology • University of Sumer, Thi-Qar, Iraq

## Education

BSc. University of Technology/Control and Systems Eng. Dept. Computer Eng. Branch, Baghdad, Iraq 2010

MSc. University of Technology/Control and Systems Eng. Dept. Computer Eng. Branch, Baghdad, Iraq 2015



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[other](#)



### Skills

FPGA Design, Image Processing, Real-Time Systems, Digital Electronics, Deep Learning, Advanced Machine Learning

### Programming languages

Python, Verilog, VHDL, MATLAB, Visual Basic, C++, PHP.

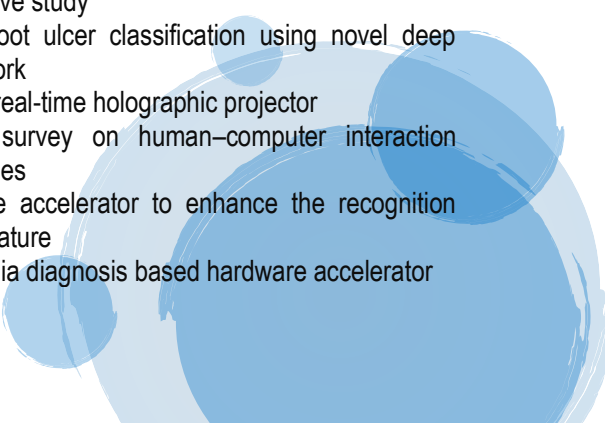
### Translation

- He has a TOEFL certificate in English.
- The ability to translate from English to Arabic and vice versa.
- The ability to translate websites.
- Good at conversation in English.
- Fluency in Arabic and English grammar.

**H-index = 26**

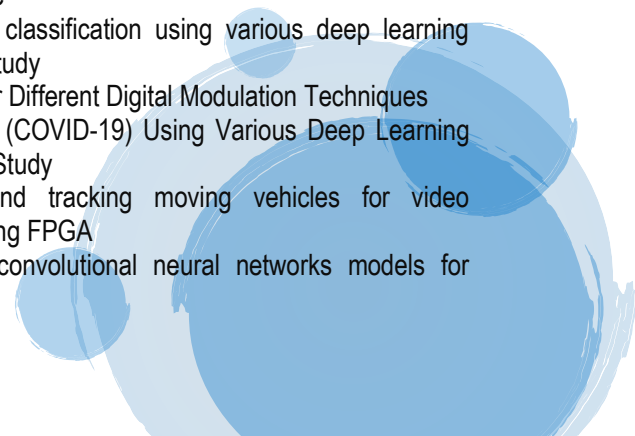
**Citations = 10042**

### Scientific publications

1. Employing Parallel Hardware Architectures to Diagnose Sickle Cell Anemia in Real-Time Basis
  2. Robust application of new deep learning tools: An experimental study in medical imaging
  3. Classification of red blood cells in sickle cell anemia using deep convolutional neural network
  4. Performance comparison for lane detection and tracking with two different techniques
  5. Robust spectrum sensing detector based on mimo cognitive radios with non-perfect channel gain
  6. Image processing-based diagnosis of sickle cell anemia in erythrocytes
  7. Enhancing Apple Maturation Recognition Performance Based on Field Programmable Gate Array Implementation
  8. Lane detection system for day vision using altera DE2
  9. Real-time PCG diagnosis using FPGA
  10. Employment of pre-trained deep learning models for date classification: A comparative study
  11. DFU\_QUTNet: diabetic foot ulcer classification using novel deep convolutional neural network
  12. Hardware accelerator for real-time holographic projector
  13. Retraction Note to: A survey on human-computer interaction technologies and techniques
  14. Implementing a hardware accelerator to enhance the recognition performance of the fruit mature
  15. Real-time sickle cell anemia diagnosis based hardware accelerator
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16. Statistical accuracy analysis of different detecting algorithms for surveillance system in smart city
17. Automated Real-Time Sickle Cell Anemia Diagnosis Based on an Field Programmable Gate Array Accelerator
18. Novel transfer learning approach for medical imaging with limited labeled data
19. Deep learning models for classification of red blood cells in microscopy images to aid in sickle cell anemia diagnosis
20. FPGA-based lane-detection architecture for autonomous vehicles: A real-time design and development
21. Solving lorenz ode system based hardware booster
22. Review of deep learning: Concepts, CNN architectures, challenges, applications, future directions
23. Optimizing the performance of breast cancer classification by employing the same domain transfer learning from hybrid deep convolutional neural network model
24. Efficient Data Transmission and Remote Monitoring System for IoT Applications
25. Recognition of the unripe strawberry by using color segmentation techniques
26. Human Speaker Recognition Based Database Method
27. Towards a better understanding of transfer learning for medical imaging: a case study
28. A deep convolutional neural network model for multi-class fruits classification
29. Robust and efficient approach to diagnose sickle cell anemia in blood
30. Human emotion classification based on respiration signal
31. Employing FPGA accelerator in real-time speaker identification systems
32. Employment of multi-classifier and multi-domain features for PCG recognition
33. Internet of things (IoT): A technology review, security issues, threats, and open challenges
34. Image Processing-Based Diagnosis of Sickle cell Anemia in Erythrocytes
35. Boosting convolutional neural networks performance based on FPGA accelerator
36. Multi-class breast cancer classification by a novel two-branch deep convolutional neural network architecture
37. Rapidly-fabricated nightly-detected lane system: An FPGA implemented architecture
38. Automated brain tumor classification using various deep learning models: a comparative study
39. Comparative Analysis for Different Digital Modulation Techniques
40. Diagnosing Coronavirus (COVID-19) Using Various Deep Learning Models: A Comparative Study
41. Real-Time detection and tracking moving vehicles for video surveillance systems using FPGA
42. Comparison of hybrid convolutional neural networks models for





- diabetic foot ulcer classification
43. Deepening into the suitability of using pre-trained models of ImageNet against a lightweight convolutional neural network in medical imaging: An experimental study
  44. MedNet: pre-trained convolutional neural network model for the medical imaging tasks
  45. IoT and cloud computing in health-care: A new wearable device and cloud-based deep learning algorithm for monitoring of diabetes
  46. Energy efficiency for green Internet of Things (IoT) networks: A survey
  47. Face recognition based on Deep Learning and FPGA for ethnicity identification
  48. Method for Building a Database Dependent on Human Voice Recognition (HVR)
  49. AN INTELLIGENT TIRE WEAR PREDICTION USING PARALLEL HARDWARE ARCHITECTURE
  50. Identifying corn leaves diseases by extensive use of transfer learning: a comparative study
  51. Enhancing Apple Maturation Recognition Performance Based on Field Programmable Gate Array Implementation
  52. Arduino utilized for dynamic Automatic Security Locker System
  53. A systematic review of trustworthy and explainable artificial intelligence in healthcare: assessment of quality, bias risk, and data fusion
  54. Parallel processing of E-Attheer algorithm using pthread paradigm
  55. A survey on deep learning tools dealing with data scarcity: definitions, challenges, solutions, tips, and applications

For more details see references [1][2][3].

### References

- [1] [https://scholar.google.com/citations?hl=en&user=PKyfXvYAAA&view\\_op=list\\_works](https://scholar.google.com/citations?hl=en&user=PKyfXvYAAA&view_op=list_works)
- [2] <https://www.scopus.com/authid/detail.uri?authorId=57192639808>
- [3] <https://publons.com/researcher/2960296/mohammed-a-fadhel/>

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