

**1 Name & Rank:** Abdulla M. Al-Mutawa, Associate Professor

## 2 Education

Degree	Discipline	Institution	Year
Ph.D.	Computer Science	Syracuse University	1999
M.S.	Computer Science	Syracuse University	1996
B.S.	Computer Engineering	Kuwait University	1994

## 3 Academic Experience

Institution	Designation	Year/Period
Ministry of Education	Consultant to HH Minister Of Education of Kuwait State	Mar 2024 - Present
University of Hamburg	Visiting Professor	Feb 2022-Dec 2024
PLOS-ONE	Editorial Board Member	Nov 2022 - Present
MILSET	Scientific Consultant and Steering Board Member	Feb 2022 - Present
UNESCO-UN	International Expert and Consultant in AI-Ethical issues	Jan 2020 - Present
The E-learning Directors Committee at the Universities and Higher Education Institutions of Arab Gulf Cooperation Countries	Head of the Secretariat	Jul 2020-Jan 2022
Kuwait University	Acting Vice President for Academic Support Services	Jul 2020-Jan 2022
Kuwait University	Assistant Vice President for IT	Jun 2020-Jun 2022
College of Engineering and Petroleum, Kuwait University	Director of E-Services and Engineering Education at the College of Engineering and Petroleum, Kuwait University	Sep 2017-Sep 2019
Arab Robotic and AI Association	Board member of the Arab Robotic and AI Association	Oct 2016 - Present
ROBOTEC, Consultations in IT	Founder and CEO	Apr 2016 - Present
Kuwait University	Assistant Vice President for academic services for computer systems and distance learning	Oct 2012-Oct 2014
Kuwait University	Director of the Office of Engineering Education	Oct 2005-Oct 2012
Kuwait University	Associate Professor	Jul 2012 - Present
Kuwait University	Assistant Professor	May 1999-Jul 2012
Kuwait University	Scholarship	July 1994 – May 1999
Al-Ihsan K12 School, Syracuse, NY, USA	K12-Computer Instructor (volunteer)	Sep 97 – Jun 98
Kuwait University	Teaching Assistant January	1994 – July 1994

#### 4 Non-Academic Experience:

#### 5 Certifications / professional registrations:

#### 6 Membership in Professional Organization:

- IEEE Robotics and Automation Society: Piscataway, NJ, US
- IEEE Computer Society: Washington, DC, US
- IEEE Computational Intelligence Society: Piscataway, NJ, US
- IEEE Computational Intelligence Society: Piscataway, NJ, US
- IEEE: New York, NY, US
- Association for the Advancement of Artificial Intelligence: Palo Alto, CA, US
- Association for Computing Machinery: New York, NY, US
- Arab Robot and AI Association: Amman, JO
- Mouvement International pour le Loisir Scientifique Et Technique (MILSET): Paris, FR
- Arab Robotic and AI Association: Amman, JO
- GCC Standardization Organization: Riyadh, Riyadh, SA

#### 7 Honors and Awards:

- ☞- His Highness Shaik Salem Al-Sabah Award in Informatics Excellence in Artificial Intelligence 2022
- ☞- One of the architects of the ethics in AI worldwide agreement at UN
- ☞- Adviser to His Excellency the Minister of Education in the State of Kuwait
- ☞- Pioneer and visionary of the digital transformation movement in Kuwait
- ☞- The author of the blended learning book and its impact on the development of critical thinking among the students
- ☞- Winner of the first place in the Kuwait International Prize for the year 2012
- ☞- Winner of the first place in the Kuwait International Prize for the year 2011
- ☞- Winner of the first place in the Kuwait Electronic Award 2009
- ☞- Establishing the first Gulf workshop on robotics in 2008
- ☞- Won the first prize for best Poster among 300 other posters in the Second Scientific Research Conference

#### 8 Service Activities:

#### 9 Publications and Presentations (from the past five years):

- Martis, J.E.; M S, S.; R, B.; **Mutawa, A.M.**; Murugappan, M. Novel Hybrid Quantum Architecture-Based Lung Cancer Detection Using Chest Radiograph and Computerized Tomography Images. *Bioengineering* **2024**, *11*, 799. <https://doi.org/10.3390/bioengineering11080799>
- A.M. Mutawa, An end-to-end Tacotron model versus pretrained Tacotron model for Arabic text-to-speech synthesis, *Journal of Engineering Research (JER)*, Aug 22, 2023
- Mutawa, A.M.; Al Mudhahkah, H.M.; Al-Huwais, A.; Al-Khaldi, N.; Al-Otaibi, R.; Al-Ansari, A. Augmenting Mobile App with NAO Robot for Autism Education. *Machines* **2023**, *11*, 833. <https://doi.org/10.3390/machines11080833>
- Mutawa AM, Alnajdi S, Sruthi S. Transfer Learning for Diabetic Retinopathy Detection: A Study of Dataset Combination and Model Performance. *Applied Sciences*. 2023; 13(9):5685. <https://doi.org/10.3390/app13095685>
- Mutawa AM, Al Muttawa JAK, Sruthi S. The Effectiveness of Using H5P for Undergraduate Students in the Asynchronous Distance Learning Environment. *Applied Sciences*. 2023; 13(8):4983. <https://doi.org/10.3390/app13084983>

- <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0284021>  
Abisha, S., Mutawa, A. M., Murugappan, M., & Krishnan, S. (2023). Brinjal leaf diseases detection based on discrete Shearlet transform and Deep Convolutional Neural Network. *Plos one*, 18(4), e0284021.
- <https://www.intechopen.com/online-first/1129171>  
Mutawa, A. M. (2023). Perspective Chapter: MOOCS at Higher Education: Current State and Future Trends
- **A.M. Mutawa**, S.T. Tolba, "Digital Twin of a Data Center at Education Institution", *Journal of Engineering Research*, Submitted 17-10-2021, Revised 17-1-2022, Accepted 2-2-2022, Published 20-3-2022
- **A.M. Mutawa**, M Arami, 2022, 'Antecedences of Continued Blended Learning Adoption Intentions: A Framework for Acceptance of Blended Distance Learning', *Journal of Engineering Education*, Vol 10 No 2A, pp. 72-81, DOI: <https://doi.org/10.36909/jer.14171>
- **A.M. Mutawa**, S. Sruthi, "STUDENTS' PERSPECTIVE TOWARDS ONLINE PROCTORING IN EXAMS DURING COVID-19", *Journal of Engineering Research*, 2022
- M Murugappan, **A M Mutawa**, 2021 'Facial geometric feature extraction based emotional expression classification using machine learning algorithms', *PLOS ONE*, vol1 6(2): doi: 10.1371/journal.pone.0247131. PMID: 33600467; PMCID: PMC7891769.
- S. Alnajem, **A.M. Mutawa**, H. AlMeer, A. AlQemlas, 2021, 'A Prolog-based approach to Arabic syntax and semantics' *Journal of Eng. Research* Vol. 9 No. (3A) September 2021 pp. 134-142, <https://doi.org/10.36909/jer.v9i3A.10129>
- Aya Hassouneh, **A.M. Mutawa**, M Murugappan, "Development of a Real-Time Emotion Recognition System Using Facial Expressions and EEG Based on Machine Learning and Deep Neural Network Methods", *Informatics in Medicine Unlocked*. 2020
- **A.M. Mutawa**, 2019. "Single Channel Speech Enhancement using a Complex Spectrum Method", *International Journal of Circuits, Systems and Signal Processing*, Vol. 13, pp. 667-677.
- **A.M. Mutawa**. 2020, 'Improving Patient Voice Intelligibility by using a Euclidian Distance-Based Approach to Improve Voice Assistant Accuracy', *International Journal of Circuits, Systems and Signal Processing*, Vol 14, pp 329-339
- <https://www.sciencedirect.com/science/article/pii/S0933365718302380>  
**A.M. Mutawa**, Mariam A. Alzuwawi, 2019, 'Multilayered rule-based expert system for diagnosing uveitis', *Artificial Intelligence in Medicine*, vol 99

### Books and Chapters

- A.M. Mutawa. "Government Digital Transformation: A road map" The Gulf Study Center, Kuwait University, June 2023. DOI: 10.5772/intechopen.1001367
- A.M. Mutawa, "Perspective Chapter: MOOCS at Higher Education: Current State and Future Trends," in *Massive Open Online Courses - Current Practice and Future Trends*, G. Dr. Sam Ed. Rijeka: IntechOpen, 2023, Peer-reviewed chapter. Submitted: January 28th, 2023 Reviewed: February 22nd, 2023 Published: March 28th, 2023. DOI: 10.5772/intechopen.1001367
- A.M. Mutawa, "DISTANCE LEARNING IN A PANDEMIC - CHALLENGES, OPPORTUNITIES, AND ASSESSMENT STRATEGIES", Eliva Press SRL, peer-reviewed book. ISBN-10: 9994988581. July. 2023.
- A.M. Mutawa. "Chat GPT and the Future of Education in the Age of Artificial Intelligence in the Gulf Countries" The Gulf Study Center, Kuwait University, 2023

### 10 Recent Professional Development Activities: