

Mohammad Ghuloom Al-Failakawi-2024



1 **Name & Rank:** Mohammad Ghuloom Al-Failakawi, Associate Professor.

2 Education

Degree	Discipline	Institution	Year
Ph.D.	Electrical Engineering	University of Wisconsin-Madison	2002
M.Sc.	Electrical Engineering	University of Wisconsin-Madison	1999
B.Sc.	Computer Engineering	University of Missouri, Columbia	1996
B.Sc.	Electrical Engineering	University of Missouri, Columbia	1996

3 Academic Experience

Institution	Designation	Year/Period	FT/PT
Kuwait University	Associate Professor	2012 - present	FT
Kuwait University	Assistant Professor	2002 - 2012	FT

4 Non-Academic Experience

Organization	Designation	Year/Period	FT/PT
Deanship of Admission & Registration	Active Vice dean for Admission & graduates affairs	2023-present	FT
Computer Engineering Department	Acting chairman	2022-2023	FT
Computer Engineering Department	Chairman	2018-2022	FT
Delft University of Technology	Visiting Researcher	2016 - 2017	FT
College of Computing Science & Engineering	Acting dean	May-Sep.2015	FT
College of Computing Science & Engineering	Vice dean for academic affairs	2012-2014	FT
College of Engineering and Petroleum	Director of Engineering Training & Alumni Center	2009 - 2012	FT

5 **Certifications / professional registrations:** None.

6 Membership in Professional Organization

a. IEEE, Member, 1998 - 2018.

7 Honors and Awards

- Unfunded Research Award, "Parallel and Distributed Implementation of Whale Optimization Algorithm on Apache Spark", 2021.
- Unfunded Research Award, "Apache Spark Implementation of Whale Optimization Algorithm", 2021.
- Gold medal recipient, 12th International Invention Fair in the Middle East, 16-19 February 2020, Kuwait.
- Unfunded Research Award, "Machine learning-based Auto-Scaling for Containerized Applications", 2020.
- Ahmad, I., Imdoukh, M. and Alfailakawi, M. G., US patent US 20190103150A1, 2019
- Unfunded Research Award, "Harmony-search Algorithm for 2D Nearest Neighbor Quantum Circuit Realization", 2019.

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- g. Ahmad, I., Hamouda, A.H. and Alfailakawi, M. G., US patent US9891843B2, 2018
- h. Research Project Award, Project QE02/14, 2016.
- i. Unfunded Research Award, "Depth Optimization of Topological Quantum Circuits", 2015.
- j. Unfunded Research Award, "Line ordering of reversible circuits for linear nearest", 2013.
- k. Unfunded Research Award, "Broadcast scheduling in packet radio networks using Harmony Search algorithm", 2012.
- l. Distinguished Teaching Award for sciences, Kuwait University, 2011.
- m. Best Electronic Course (2nd Place), College of Engineering and Petroleum, 2010.
- n. Best Electronic Course (1st Place), College of Engineering and Petroleum, 2006.

8 Service Activities

- a. Gave many tutorials for College of Engineering, College of Education, and College of Shariaa & Islamic Studies on MS teams and other distant learning tools during covid-19 pandemic, 2020.
- b. Reviewer: Microelectronics Reliability, Elsevier. 2021
- c. Reviewer, Machine learning with Application, Elsevier. 2022
- d. Reviewer, Integration, Elsevier, 2020
- e. Head of Judging Committee, Kuwait Science and Engineering Competition (2017-Present)

9 Publications and Presentations (from past five years)

- a. Maryam Aljame, Aisha Alnoori, Mohammad Gh. Alfailakawi, Imtiaz Ahmad, "*A Spark-Based Parallel Implementation of Arithmetic Optimization Algorithm*", International Journal of Applied Metaheuristic Computing, Vol 14, issue 1, pp 1-27, 2023
- b. Jassim Alfadhli, Ali Jaragh, Mohammad Alfailakawi, Imtiaz Ahmad, "FP-SMA: An Adaptive, Fluctuant Population Strategy for Slime Mould Algorithm", Neural Computing and Applications, Vol. 34, pp 11163-11175, 2022, <https://doi.org/10.1007/s00521-022-07034-6>
- c. Mohammad Alfailakawi, Maryam Aljame, Imtiaz Ahmad, "Parallel and Distributed Implementation of Sine Cosine Algorithm on Apache Spark Platform", IEEE Access, vol. 9, pp. 77188-77202, 2021, doi: 10.1109/ACCESS.2021.3082026
- d. Hala Al-Faisal, Imtiaz Ahmad, Ayed A Salman, and Mohammad Gh. Alfailakawi, "Adaptation of Population Size in Sine Cosine Algorithm", IEEE Access, Vol. 9, pp 25258-25277, 2021, doi: 10.1109/ACCESS.2021.3056520
- e. Marwa Kandil, Ali Kelkawi, Imtiaz Ahmad, Mohammad Gh. Alfailakawi, "COVID-XIX-Net: Deep Learning Empirical Comparison Between X-ray Imaging and POCUS for COVID-19 Detection", Journal of Engineering Research, Vol. 9, No. 4A, pp 87-97, 2021.
- f. Imtiaz Ahmad, Mohammad Alfailakawi, asayel Almutawa, Latifah alsalman, "Container Scheduling Techniques: A survey and Assessment", Journal of King Saud University – Computer and Information sciences, Vol. 34, Issue 7, pp 3934-3947, 2021
- g. Maryam Aljame, Imtiaz Ahmad, Mohammad Gh. Alfailakawi, "Apache Spark Implementation of Whale Optimization Algorithm", Cluster Computing, Vol. 23, pp 2021-2034, 2020.
- h. Mahmoud Imdoukh, Imtiaz Ahmad, Mohammad Gh. Alfailakawi, "Optimizing scheduling decisions of container management tool using many-objective genetic algorithm", Concurrency and Computation: Practice and Experience, Vol. 32, No. 5, e5536, 2020.

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- i. Mahmoud Imdoukh, Imtiaz Ahmad, Mohammad Gh. Alfailakawi, "Machine learning-based Auto-Scaling for Containerized Applications", Neural Computing and Applications, Vol. 32, pp 9745-9760, 2020.
- j. Mohammad Alfailakawi, Mohammed El-Shafei, Imtiaz Ahmad, Ayed Salman, "FPGA-Based Implementation of Cuckoo Search", IET Computers and Digital Techniques, Vol. 13, No. 1, pp 28-37, January 2019.

10 Recent Professional Development Activities

- a. Attended the following workshops:
 - 1. Workshop on "Designing Effective Learning Experiences", Teaching excellence program, Kuwait University, March, 2019
 - 2. Workshop on "Marketing your invention", Oxford's global innovation consultancy, Kuwait University, February, 2019.