Mohammad Ghuloom Al-Failakawi-2024

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

❷ **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

❸ **Academic Experience**

Institution	Designation	Year/Period	FT/PT
Kuwait University	Professor	2025 - present	FT
Kuwait University	Associate Professor	2012 - present	FT
Kuwait University	Assistant Professor	2002 - 2012	FT

❹ **Non-Academic Experience**

Organization	Designation	Year/Period	FT/PT
Deanship of Admission & Registration	Acting 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

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

❻ **Membership in Professional Organization**
   a. IEEE, Member, 1998 - 2018.

❼ **Honors and Awards**
- Patent: Ahmad, I., Imdoukh, M. and Alfailakawi, M. G., Minimizing two-step and hard state transitions in multilevel STT MRAM devices, US patent US 20190103150A1, 2019
- Patent: Ahmad, I., Hamouda, A.H. and Alfailakawi, M. G., Odd/even invert coding for phase change memory with thermal crosstalk, US patent US9891843B2, 2018
- Gold medal recipient, 12th International Invention Fair in the Middle East, 16-19 February 2020, Kuwait.
- Unfunded Research Award, "Parallel and Distributed Implementation of Whale Optimization Algorithm on Apache Spark", 2021.
- Distinguished Teaching Award Was awarded Kuwait University Distinguished Teaching Award for sciences, 2011.

- Best Electronic Course (1st Place), College of Engineering and Petroleum Best Electronic course, 2006.

⑧ **Service Activities**

- 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.
- Reviewer, Machine Learning with Application, 2022
- Reviewer, Microelectronics reliability, 2021.
- Program Committee Member, International Design & Test Symposium, 2012-2016
- Head of Judging Committee, Kuwait Science & Engineering Competition, Kuwait Science Club (2015-present).

⑨ **Publications and Presentations (from past five years)**

- Shadan Alsaqer, Sarah Alajmi, Imtiaz Ahmad, Mohammad Alfailakawi, *"The potential of LLMs in hardware design"*, Journal of Engineering Research, accepted to appear, 2024, https://doi.org/10.1016/j.jer.2024.08.001

- 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, http://dx.doi.org/10.4018/IJAMC.318642

- 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

- 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, http://dx.doi.org/10.1109/ACCESS.2021.3082026

- 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

- 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. https://doi.org/10.36909/jer.12233

- 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, https://doi.org/10.1016/j.jksuci.2021.03.0

- Maryam Aljame, Imtiaz Ahmad, Mohammad Gh. Alfailakawi, *"Apache Spark Implementation of Whale Optimization Algorithm"*, Cluster Computing, Vol. 23, pp 2021-2034, 2020. DOI:10.1007/s10586-020-03162-7

- 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. DOI:10.1002/cpe.5536

- 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. DOI:10.1007/s00521-019-04507-z

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.