

# 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	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

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

## 6 Membership in Professional Organization

a. IEEE, Member, 1998 - 2018.

## 7 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.

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## 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:

## Mohammad Ghuloom Al-Failakawi-2024

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.

