Imtiaz Ahmad -2024

❶ **Name & Rank:** Imtiaz Ahmad, Professor.

❷ **Education**

Degree	Discipline	Institution	Year
Ph.D.	Computer Engineering	Syracuse University, Syracuse, New York, USA	1992
M.S.	Electrical Engineering	King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia	1988
B.S.	Electrical Engineering	University of Engineering & Technology, Lahore, Pakistan	1984

❸ **Academic Experience**

Institution	Designation	Year/Period	FT/PT
Syracuse, New York, USA	Visiting Researcher (On sabbatical leave)	2000 - 2001	FT
King Fahd University of Petroleum & Minerals	Graduate Teaching Assistant	1985 - 1988	FT

❹ **Non-Academic Experience:**

Organization	Designation	Year/Period	FT/PT
Computing & Network Services Syracuse University	Computer Networks Administrator	1991 - 1992	FT
MILPAK Ltd Lahore, Pakistan	Instrument Engineer	1984 - 1985	FT

❺ **Certifications / professional registrations:** None

❻ **Membership in Professional Organization:**

Pakistan Engineering Council

❼ **Honors and Awards:** None

❽ **Service Activities:**
   a. **Department level:**
      i. Member of Undergraduate Program Committee (September 2019 – August 2021)
      ii. Member of Hardware Tag Committee (September 2020 – August 2025)
      iii. Member of Labs and Equipment Committee (September 2020 – August 2021)
      iv. Coordinator for Computer Architecture Lab. (CpE-469) (Sept. 2021 – August 2024)
      v. Member of Undergraduate Program Committee (September 2023 – August 2025)
      vi. Member of Graduate Program Committee (September 2024 – August 2025)
   b. **College level:**
      i. Member of iAuthenticate Guidelines Review Committee (January 2021 – March 2021)
      ii. Member of Appointment Committee for English Unit Instructors (July 2022 – August 2022)
      iii. Member of Scientific Missions Examination Committee (Sept. 2022 – August 2024)
      iv. Coordinator for iThenticate Committee (September 2022 – August 2025)

   c. **University level:**
      i. Member of the University Promotion Committee (September 2019 – August 2021)
      ii. Member of the KFAS Kuwait Prize Search and Nomination Committee (2020)

⑨ Publications and Presentations (from past five years):

a. Mariam AlJamea, I. Ahmad, A. Imtiaz and A. Mohammed, Ensemble learning model for diagnosing COVID-19 from routine blood tests, Informatics in Medicine Unlocked, Volume 21, 2020, 100449.

b. Mariam AlJamea, I. Ahmad, and M. Alfailakawi, Apache Spark implementation of Whale Optimization Algorithm, Cluster Computing, volume 23, pages 2021–2034 (2020).

c. E. Hassan, Y. Khalil, and I. Ahmad, Learning Feature Fusion in Deep Learning-Based Object Detector, Journal of Engineering, Article ID 7286187, 11 pages, 2020.

d. S. Abed, A. A. M. R. Behiry and I. Ahmad, Error metrics determination in functionally approximated circuits using SAT solvers, PLoS ONE 15(1): e0227745, pp. 1-19, 2020.

e. M. Imdoukh, I. Ahmad, and M. Alfailakawi, Optimizing scheduling decisions of container management tool using many-objective genetic algorithm, Concurrency and Computation: Practice and Experience, Vol. 32, Issue 5, pp. 1-16, March 2020.

f. M. Imdoukh, I. Ahmad, and M. Alfailakawi, Machine learning based auto-scaling for containerized applications, Neural Computing and Applications, 32:9745–9760, 2020.

g. M. Alfailakawi, Mariam AlJamea, and I. Ahmad, Parallel and Distributed Implementation of Sine Cosine Algorithm on Apache Spark Platform, IEEE Access, Volume 9, Pages: 77188-77202, June 2021.

h. Ahmad, M. Gh. Alfailakawi, A. AlMutawa, and L. Alsalman, Container scheduling techniques: a survey and assessment, Journal of King Saud University - Computer and Information Sciences, 34:3934-3947, 2022.

i. H. Al-Faisal, I. Ahmad, A. Salman, and M. Alfailakawi, Adaptation of population size in Sine Cosine Algorithm, IEEE Access, Volume 9, Pages: 25258-25277, February 2021.

j. M. K. Awad, M. H. H. Ahmed, A. F. Almutairi, I. Ahmad, Machine learning-based multipath routing for software defined networks, Journal of Network and Systems Management, Vol. 29, Issue 2, pp. 1-30, 2021.

k. S. Abed, A. A. Abdelaal, M. H. Al-Shayeji and I. Ahmad, SAT-based and CP-based declarative approaches for top-rank-k closed frequent itemset mining, International Journal of Intelligent Systems, Vol. 36, No. 1, pp. 112-151, January 2021.

l. M. Kandil, A. Kelkawi, I. Ahmad, M. 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, December 2021.

m. M. AlJamea, A. Imtiaz, I. Ahmad, and A. Mohammed, Deep Forest Model for Diagnosing COVID-19 From Routine Blood Tests, Scientific Reports, 11:16682, 2021.

n. Z. Ali, A. Mohammed, and I. Ahmad, Evaluating adversarial robustness of secret key-based defenses, IEEE Access, Volume 10, pp. 34872-34882, 2022.

o. J. Alfadhli, A. Jaragh, M. Alfailakawi, I. Ahmad, FP-SMA: An adaptive, fluctuant population strategy for slime mould algorithm, Neural Computing and Applications, 34, pp. 11163-111175, 2022.

p. M. Alshayeji, B. Bahbahani, I. Ahmad, Spark-based parallel processing Whale Optimization Algorithm, Concurrency and Computation: Practice and Experience, Volume 34, Issue 4, e6607, February 2022.

q. I. Ahmad, M. Gh. Alfailakawi, A. AlMutawa, and L. Alsalman, Container scheduling techniques: a survey and assessment, Journal of King Saud University - Computer and Information Sciences, 34:3934-3947, 2022.

r. A. Kelkawi, M. El-Abd, I. Ahmad, GPU-based cooperative coevolution for large scale global optimization, Neural Computing and Applications, 35, pages 4621–4642, February 2023.

s. H. Sharaf, I. Ahmad, T. Dimitriou, Extended berkeley packet filter: An application perspective, IEEE Access, Vol. 10, pp. 126370-126393, December 2022.

t. A. Kelkawi, I. Ahmad, M. El-Abd, Spark-based cooperative coevolution for large scale global optimization, Cluster Computing, pp. 1-16, June 2023.

u. L. Waleed, I. Ahmad, S. Abed, A smart admission control and cache replacement approach in content delivery networks, Cluster Computing, pp. 1-19, July 2023.

v. A. Kana, I. Ahmad, An effective Runge-Kutta optimizer based on adaptive population size and search step size, CMC-Computers, Materials & Continua, Vol. 76, No. 3, pp. 3443-3464, October 2023.

w. A. Mohammed, Z. Ali, I. Ahmad, Enhancing adversarial robustness with randomized interlayer processing, Expert Systems with Applications, Vol. 245, p. 123085, July 2024.

x. Z. Ali, A. Mohammed, I. Ahmad, Vulnerability of Deep Forest to Adversarial Attack, IEEE Transactions on Information Forensics and Security, Volume 19, pp. 5464-5475, May 2024.

y. A. Rashid, A. Gauhar, O. Hasan, S. Abed, I. Ahmad, Formal Verification of Universal Numbers using Theorem Proving, Journal of Electronic Testing: Theory and Applications, June 2024.

z. R. Kablaoui, I. Ahmad, S. Abed, M. Awad, Network Traffic Prediction by Learning Time Series as Images, Engineering Science and Technology, an International Journal, Volume 55, July 2024, 101754.

aa. S. Alsaqer, S. Alajmi, I. Ahmad, M. Alfailakawi, The potential of LLMs in hardware design, Journal of Engineering Research, August 2024, https://doi.org/10.1016/j.jer.2024.08.001

bb. S. Abed, G. Aldamkhi, I. Ahmad, Information Hiding using Approximate POSIT Representation, IET Image Processing, pp.1–29, September 2024, DOI:10.1049/ipr2.13244

cc. A. Alajmi, B. AlSarraf, Z. Abualhassan, A. Fairouz, I Ahmad, TinyBERT for Branch Prediction in Modern Microprocessors, To appear in Neural Computing and Applications, October 2024.

⑩ Recent Professional Development Activities:

Presented papers in different conferences.

Chaired/co-chaired sessions in some conferences.

Presented tutorial on high-level synthesis in Saudi Arabia, Turkey, and USA.

Refereeing Journals:

Oxford Open Energy

Expert Systems with Applications

Swarm and Evolutionary Computation

Intelligent Systems with Applications

Scientific Reports

IEEE Access

Informatics in Medicine Unlocked

IEEE Communications Letters

Computer Networks

IEEE transactions on Emerging Topics in Computing

IEEE transactions on Network and Service Management

Journal of Network and Computer Applications

Journal of Supercomputing

Information Sciences

International Journal of Reconfigurable Computing

Walailak Journal of Science and Technology
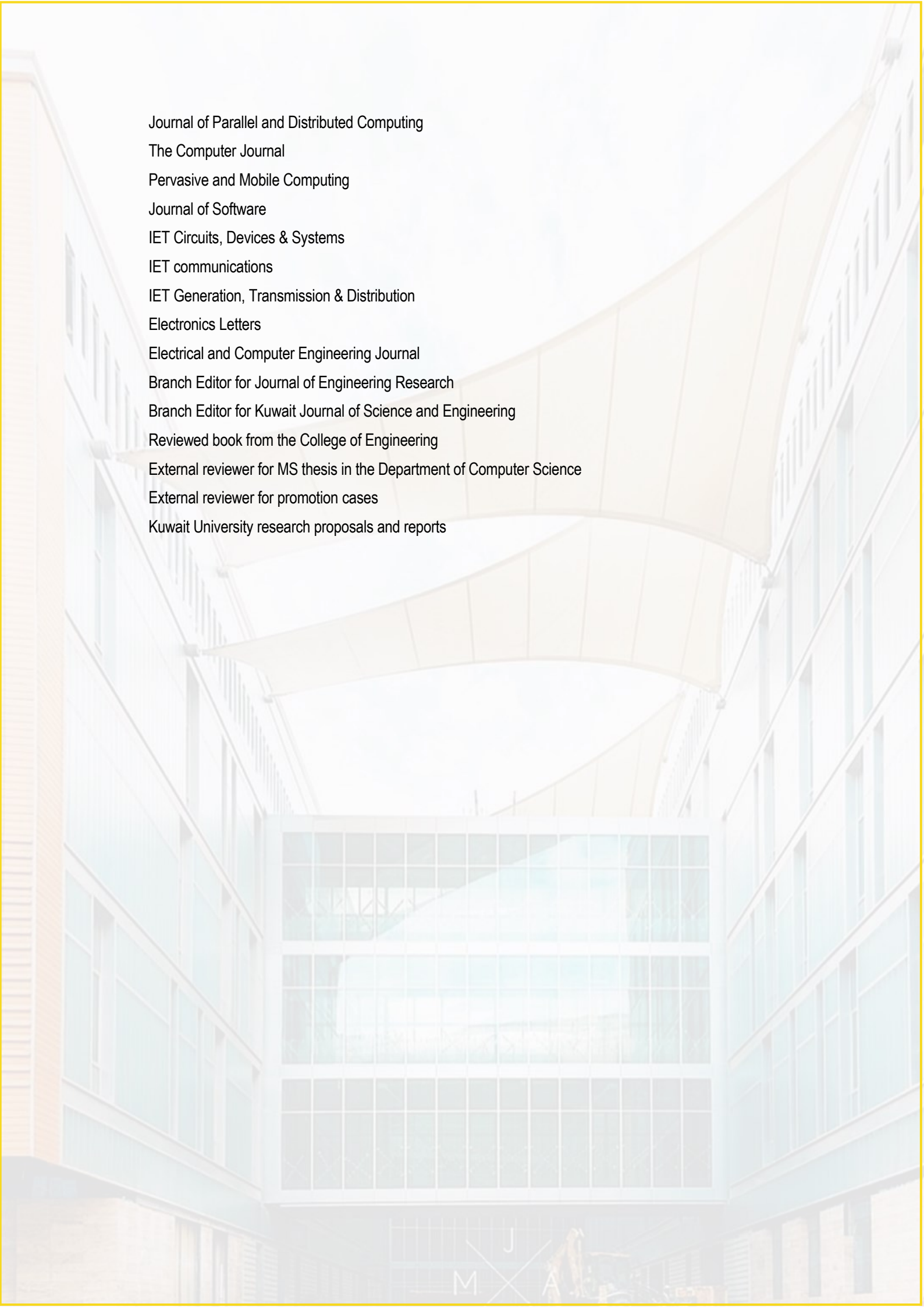
Mathematical Problems in Engineering

Journal of Systems and Software

Journal of Sustainable Computing: Informatics and Systems

International Journal of Parallel, Emergent and Distributed Systems

International Scholarly Research Notices

IEEE Transactions of Parallel and Distributed Systems

Journal of Parallel and Distributed Computing

The Computer Journal

Pervasive and Mobile Computing

Journal of Software

IET Circuits, Devices & Systems

IET communications

IET Generation, Transmission & Distribution

Electronics Letters

Electrical and Computer Engineering Journal

Branch Editor for Journal of Engineering Research

Branch Editor for Kuwait Journal of Science and Engineering

Reviewed book from the College of Engineering

External reviewer for MS thesis in the Department of Computer Science

External reviewer for promotion cases

Kuwait University research proposals and reports