NAZAR ELFADIL M. ADAM PhD

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OBJECTIVE

Seeking the role of Reader / Senior Lecturer in Computer Engineering, to serve, excel and contribute generously to educational and research institutions by enhancing skills and exchanging ideas with others

PROFESSIONAL SUMMARY

My research interests encompass various facets of digital systems, machine learning, vehicle communication, network and information security, wireless sensor networks, and engineering education. These interests can be categorized into several primary areas:

- Network & Information Security: Focusing on the integration of handwritten and digital signatures to bridge the cultural divide between the two.
- Medical Engineering: Exploring methods for identifying patients with congestive heart failure through various neural network approaches.
- Wireless Sensor Networks: Developing a Voting Median Base Algorithm aimed at the approximate performance monitoring of wireless sensor networks.
- Machine Learning & Automation: Investigating automated knowledge acquisition techniques.
- Engineering Education: Examining embedded systems through teaching methodologies, student preparedness, and design challenges.
- Telecommunication: Conducting path-loss analysis using the Okumura-Hata model and spline interpolation for missing data in Oman, as well as creating a system for communicating vehicle position and speed during accidents.

I have an impressive record of over 70 publications in peer-reviewed journals, book chapters, patents, and conference proceedings, reflecting significant contributions to the fields of computer engineering and computer science. (Refer to Appendix A for a comprehensive list of publications and Appendix G for my Statement of Research Philosophy.)

Additionally, my research has garnered more than 340 international citations, as documented by Web of Science, detailed in Appendix B. Many of my publications have resulted from robust interdisciplinary collaborations with researchers across various scientific domains, including education and computer science, and from institutions in multiple countries such as the UK, USA, Malaysia, Oman, Saudi Arabia, Qatar, and Australia.

BRIEF CAREER HISTORY

College of Computing, Department of Computer Engineering, Fahad Bin Sultan University, Saudi Arabia

- Acting Chairperson, Computer Engineering Dept. (Sept. 2021 – Present)
- Acting Dean & Associate Professor, Computer Engineering Dept. (Nov. 2010 – Sept. 2021)
- Acting Chairperson, Computer Engineering Dept. (Sept. 2010 – Nov. 2010)
- Associate Professor, Computer Engineering Dept. (Sept. 2008 – Present)

College of Engineering, Department of Computer Engineering, Sultan Qaboos University, Oman

- Assistant Professor in Computer Engineering (Aug. 2003 – Aug. 2008)

School of Computer Engineering, Nottingham University, Malaysia

- Assistant Professor in Computer Engineering (Jan. 2001 – Aug. 2003)

QUALIFICATIONS AND PROFESSIONAL DEVELOPMENT

- Ph.D. in Electrical Engineering (Computer Engineering) – University Technology Malaysia, (2002)
- M.Sc. in Computer Science (Network Security) – University Technology Malaysia, (1998)
- B.Sc. (Honors Class) in Science & Technology (Telecommunication & Control) – University of Gezira, , Sudan (1993)

PROFESSIONAL ACTIVITIES

- Member in several Committee / Consultancy / Association Memberships; details provided in Appendix F.
- Invited speaker in several Conference and workshops; details provided in Appendix F.
- Editor and reviewer of several international conference and journals; details provided in Appendix F.
- Programs developed; details provided in Appendix I.

FELLOWSHIPS AND AWARDS

- Letter of appreciation from University Technology Malaysia for supervising FBSU students attended summer course 2011.
- Awarded a certificate of appreciation from His Excellency the President of Sultan Qaboos University for my contribution in the preparation of all ECCE Programs for ABET accreditation.2006
- Awarded a certificate of appreciation from His Excellency the President of Sultan Qaboos University for my contribution in the organization of the successful international conference ICCCP'07, which was held at SQU, Feb.19-21, 2007.
- Awarded a certificate of appreciation from His Excellency the President of Sultan Qaboos University for my
- contribution in the organization of the successful international conference ICCCP'05, which was held at SQU, Feb.14-16, 2005.
- Awarded a certificate of recognition from the Dean of the College of Engineering and the Head of the Department of Electrical and Computer Engineering, for my efforts and contribution in organizing the international conference ICCCP'05 which was held at SQU, Feb.14-16, 2005.
- Earned merit scholarship for PhD degree in Electrical Engineering. Malaysian government 2002.
- Letter of appreciation, for supervising 1st prize winner project in 1st national scientific innovations competition 2010
- Sudan government scholarship for Master degree in Computer Science. 1997

REFEREES

- Provided on request.

Appendix A

Publication List
Summary

Type	Patents	Chapters	Journals	Conferences	Invited spearkers	Artiles & Reporst	Graduate supervision
Published	1	4	43	22	7	6	15
In process			2	0			2

Patents

1. Nazar "System for communicating a vehicle position and speed during accident". US patent application 61,538,862, filed on Sep 15, 2012. Publication date: Mar 28, 2013. http://www.google.com/patents/US20130079973.

Chapters in Books (4 chapters)

1. Nazar, Yaqoob. (2013) Security, Privacy, Trust, and Resource Management in Mobile and Wireless Communications Book. Voting Median Base Algorithm for Approximate Wireless Sensor Network Performance. IGI Global Publishing, USA.

2. Hussain, Nazar. (2011) Identification of Patients Based on Spectral Analysis of Heart Rate Variability using Artificial Neural Networks. Artificial Neural Network Book. Nova publisher.

3. Nazar, Yaqoob. (2010) Wireless Sensor Networks: Application Centric Design Book. Monitoring Wireless Sensor Networks Performance by Tracking Node Operational Deviation. IN-TECH Publisher, Vienna, Austria.

4. Nazar, Dino. (2003) Knowledge-Based Intelligent Information and Engineering Systems Book. Automated Knowledge Acquisition Based on Unsupervised Neural Network and Expert System Paradigms. Springer Berlin / Heidelberg.

Journal Publications (43 papers)

1. Norah Hajij Alatawi, and Nazar ALfadel. "Anomaly Detection in IOT-Based ICU Using Machine Learning and Feature Engineering Algorithms". In process
2. Abdullah Saad Albishri, and Nazar EL Fadel. "Design & Development of a High-speed Performance ALU by Using Execution Modes and Multi-Operand Operation". In process
3. RNH Alhwety, N Elfadil, "Vehicle Tracking System Approaches: A Systematic Literature Review". International Journal of Computer Science and Mobile Computing 13 (8), 23-31-2024.
4. Shatha Nasser, Nazar Elfadil. "An Automated System for Sleep Apnea Detection". International Journal of Computer Science and Mobile Computing 12 (10), 1-21. IJCSMC, Vol. 12, Issue. 10, October 2023, pg.20 – 32.
5. Alaa .A. Alfaridi, and Nazar Elfadil. "Face Emotion Recognition Using Machine Learning and Transfer Learning Method". Journal of Network Communications and Emerging Technologies. Vol(12), issue 8, pp. 1-8.
6. Sultan Alatawi, Nazar Elfadil. "An Enhancement of Hierarchical Clustering Algorithms". International Journal of Science and Research (IJSR) 11 (10), 871-882.
7. Waleed Almutlag, Nazar Elfadil. "A Comparative Performance Evaluation of IPv4/IPv6 Using Network Simulation and Virtualization Tools". International Journal of Computer Science and Mobile Computing 11 (10), 56-65
8. Nazar Elfadil, Intisar Ibrahim. "Traffic Light Control Design Approaches: A Systematic Literature Review". International Journal of Electrical and Computer Engineering (2022). International Journal of Electrical & Computer Engineering (2088-8708) 12 (5)
9. Alaa .A. Alfaridi, Nazar Elfadil. "Face Emotion Recognition Using Machine Learning and Transfer Learning Method". Journal of Network Communications and Emerging Technologies 12 (8), 1-8
10. Nazar Elfadil, and Intisar Ibrahim (2022). "Embedded System Design Student's Learning Readiness Instruments: Systematic Literature Review". Frontiers in Education, Vol. 7, article 799683.
doi: 10.3389/feduc.2022.799683.
11. Wejdan Aljohni, Nazar Elfadil, Mutsam Jarajreh. "Cybersecurity Awareness Level: The Case of Saudi Arabia University Students". International Journal of Advanced Computer Science and Applications. 2021. Scopus Q3
12. Sarah Saad Alanazi, Nazar Elfadil, Mutsam Jarajreh, Saad Algarni, "Question Answering Systems: A Systematic Literature Review". International Journal of Advanced Computer Science and Applications. 2021. Scopus Q3
13. Ibtisam Mousa Alatawi, Nazar Elfadil. "Face Recognition System Approach Based on Neural Networks and Discrete Wavelet Transform". International Journal of Computer Science and Mobile Computing 9 (9), 1-21
14. Wejdan Aljohani, Nazar Elfadil. "Measuring Cyber Security Awareness of Students: A Case Study at Fahad Bin Sultan University". International Journal of Computer Science and Mobile Computing 9 (6), 141 – 155. 2020
15. Reem Alrais, Nazar Elfadil. " Support Vector Machine for Medical Image Classification of Tumorous". International Journal of Computer Science and Mobile Computing 9 (6), 37 – 45. 2020
16. Abdullah Saud, Nazar Elfadil. "Biometric Authentication by Using Fingerprint Recognition System".
International Journal of Scientific Engineering and Science 4 (5), 22-28. 2020
17. Mohd, CY Kent, Nazar Elfadil. "Development of Arduino Based Real Time Bus Tracking and Monitoring System". International

Journal of Computer Trends and Technology 68 (4), 100-106

18. Mohd, NHB Azizan, Nazar Elfadil. "Design and Development of Microcontroller Based Automatic Fish Feeder System". International Journal of Engineering Science and Computing 10 (4), 25380-25383

19. Mohamed, LL Kun, Nazar Elfadil. "An Embedded Autonomous Search and Rescue Mobile Robotic System for Alive Human Detection". International Journal of Modern Trends in Engineering and Research (IJMTER). 7 (4), 22 – 29.

20. Nazar Elfadil. "Machine learning and automation". First scientific forum 2018: Health informatics, Robotics, and information security

21. Nazar Elfadil. " Wireless Sensor Networks Performance Measurement Approach". International Journal of Scientific Engineering and Science 2 (11), 56-64

22. Nazar Elfadil. "Wireless Sensor Networks Performance Measurement Approach" International Journal of Scientific Engineering and Science (IJSES). Volume 2, Issue 11, pp. 56-64, 2018.

23. Nazar, "Impact of Using Modified Open Area Okumura-Hata Propagation Model in Determination of Path-loss: Malaysia as Case Study," International Journal of Modern Engineering Research (IJMER), 2017. Vol. 7, Iss. 5, May. 2017, 1.

24. Intisar Ibrahim, Izzeldin Ibrahim, Rosmah Ali, Nazar Elfadil. Embedded Systems: Teaching and Design Challenges for Nonhomogenous Class. International Journal of Multimedia and Ubiquitous Engineering. Vol. 11, No. 10(2016), pp. 221-244. http://dx.doi.org/10.14257/ijmue.2016.11.10.22.

25. Intisar Ibrahim, Rosmah Ali, Mohamad Zulkefli, Nazar Elfadil. Embedded Systems Pedagogical Issue: Teaching Approaches, Students Readiness, and Design Challenges. American Journal of Embedded Systems and Applications. Vol. 3, No. 1, 2015, pp. 1-10. doi: 10.11648/j.ajesa.2015.

26. Nazar Elfadil, S. Aljhdali "System for Communicating a Vehicle position and Speed during Accident". Accepted in International Journal of Computer Applications (0975-8887). Volume 94– no.19, May 2014.

27. Nazar Elfadil, A. Hossen. "Identification of Patients with Congestive Heart Failure Using   Different Neural Networks Approaches". Journal of Technology and Health Care, European Society for Engineering and Medicine, Elsevier Science. Volume 17, Number 4 -2009. Pages 305-321.

28. Nazar, "Knowledge Extraction from Rise Time Auto Correlated Patterns". Proceeding of International Journal of Information Acquisition. Vol. 5, No. 2 (2008) 181-187.

29. F. Touati, N. Elfadil, Z. Nadir, M. B. Suwailam, and M. Loulou. "High Performance Optical Receivers Using Conventional Sub-micron CMOS Technology for Optical Communication Applications". Journal of Applied Sciences 7(4), p.p. 559-564, 2007.

30. Nazar, Ali S., A. Namanny. "An approach for integrating a handwritten signature and digital signature for a secure PKI ". Proceeding of Georgian Electronic Scientific Journal: Computer Science and Telecommunications 2006. No.2 (9), pp. 195-202. June 2006. ISSN 1512-1232.

31. Nazar, & I. Ibrahim "Knowledge Extraction from Fall Time Auto Correlated Patterns by using Neural Rule Based Expert System "Proceeding of International Journal of Information Acquisition. Vol. 3, No. 1 (2006) 1-10.

32. Md, Abdus Salam, Zia Nadir, Nazar El Fadil. "Characterization of Flashover Voltage of Polluted Insulator Energized with DC Voltage" Proceeding of TRANSACTIONS ON ELECTRICAL ENG., ELECTRONICS, AND COMMUNICATIONS (ECTI-EEC), Volume 4, No. 1, p.p. 51-55. Feb. 2006.

33. Md, Abdus Salam, Nazar El Fadil, Zia Nadir. " A Novel Approach to Predict Leakage Current in Insulators from Wind Velocity" Proceeding of TRANSACTIONS ON ELECTRICAL ENG., ELECTRONICS, AND COMMUNICATIONS (ECTI-EEC), Volume 4, No. 1, p.p. 47-50. Feb. 2006.

34. Nazar Elfadil, "Visually & digitally signed Smart card". Proceeding of Georgian Electronic Scientific Journal: Computer Science and Telecommunications 2005. No.1 (5), pp. 18-27. August 2005. ISSN 1512-1232.

35. Nazar. Elfadil "Machine Learning: An Automated knowledge acquisition based on unsupervised neural network and k-means" Proceeding of the Journal of Advanced Computational Intelligence and Intelligent Informatics, Japan. Vol.9, No.6 pp. 693-697, 2005.

36. Nazar Elfadil "Microwave attenuation studies due to rain for communication links operation in Malaysia". Proceeding of Asian journal of information technology, Volume 4 Number 7, p.p 683-688. July 2005

37. Nazar Elfadil, M. A. Salam, Zia Nadir, Jegathese Rao "Microwave attenuation studies due to rain for communication links". Georgian Electronic Scientific Journal: Computer Science and Telecommunications 2005. No.1 (5), pp. 9-17. August 2005. ISSN 1512-1232.

38. M. Salam, Nazar. Mohammad, Z. Nadir, A. Maqrashi, A. Al Kaf. "Statistical Approach to Find an Empirical Relationship Between the Grounding Resistance and Length of Buried Electrode in the Soil" WSEAS Transactions on Power Systems, Issues 6, Vol. 3, pp. 1483-1486, August 2004.

39. Nazar. "Radio Propagation Path Loss Studies in Mobile Communication (GSM)". Proceeding of Asian journal of information technology, Volume 3 Number 12. Page: 1320-1327. Nov. 2004.

40. Nazar E. Mohamed, D. Issa "Automated knowledge acquisition based on unsupervised neural network and expert system paradigms". Lecture notes in Artificial Intelligence, sub-series of lecture notes in Computer Sciences, University of Oxford, Page 134- 138., United Kingdom, September 2003.

41. Nazar. "Kohonen self-organizing maps & expert system for disk network performance prediction". Special issue of Systems Analysis Modeling & Simulation (SAMA) Journal. Germany May 2002. Vol. 42, pp. 1025-1043.

42. Nazar. "Machine Learning: The Automation of Knowledge Acquisition Using Kohonen Self-Organizing Maps Neural Networks". Proceeding of Malaysian Journal of Computer Science, Malaysia. July 2001. Vol. 14, No. 1, pp. 68-72.

43. Nazar. "Unsupervised Neural Network & expert system for automated knowledge Acquisition from Network Performance Data" Proceeding of Brunei Darussalam Journal of Technology and Commerce. Nov. 2000. Vol. 2, No. 1, pp. 20-33.

Conference Publications (22 papers)

1. Intisar Ibrahim Ridwan, Kamilah Radin Salim, Zulkifli Adam, Astuty Bt Amrin, Izzeldin I. Mohd, Nazar ElFadil. " Scale Development and Validation using Rasch Analysis to Measure Students' Lifelong Learning Readiness to Learn Embedded System Design Course". Proceedings of the 9th World Engineering Education Forum, WEEF 2019 2021 (ICEPEE'21)

2. Nazar. "Machine learning and automation". Faculty of Computer and information technology First scientific forum 2018: Health informatics, Robotics, and information security. 25-26/02/2018.

3. Nazar. "Self organizing neural network approach for identification of patients h congestive heart". ". Published in IEEE-ICMCS'11 Morocco, Quarzazate, 7-9 April 2011

4. Yaqoob, Nazar, Aljahdali " Increasing the Reliability of the Collected Data in Wireless Sensor ". Proceeding of The 24th International Conference on Computer Applications in Industry and Engineering (CAINE2011). November 16-18, 2011, Sheraton Waikiki, Honolulu, Hawaii, USA.

5. Y. AL-Raisi, N. Elfadil. "A Novel Approach for Monitoring Wireless Sensor Network Performance by Tracking Node operational Deviation". Published in IEEE-ISCC2010. Italy, 22-25th of June 2010. P.p. 113-119.

6. Y. AL-Raisi, N. Elfadil. "Wireless Sensor Networks Performance Measurements and Monitoring". Published in proceeding of Symposia and Workshops on Ubiquitous, Autonomic and Trusted Computing. Brisbane July 2009, Australia. P.p. 286-291.

7. N. Elfadhil, Y. AL-Raisi. "An Approach for Multi Factor Authentication for Securing Smart Cards' Applications". ICCCE08 proceeding. May 13-15, 2008, Istana Hotel, Kuala Lumpur, Malaysia.

8. Z. Nadir, N. Elfadhil, F. Touati. "Path loss Determination Using Okumura-Hata Model and Spline Interpolation for Missing Data for Oman". The 2008 International Conference of Electrical and Electronics Engineering- World congress of Engineering 2008. London, U.K – 2-4 July, 2008. P.p. 88-91.

9. Z. Nadir, N. Elfadhil, F. Touati, B. Suhail, M. Jamal, M. Abdulrahman, "Modification of an Urban Area Okumura-Hata Propagation Model Suitable For Salalah-Oman" Proceeding of ECTI-CON2007. May 9-12, Thailand.

10. N. Elfadhil, Z. Nadir, F. Touati, A. Al-Suliemani, A. Al-Sheili, M. Al-Gharibi. "A Novel approach of Optimized Modeling of a Wireless Network for Al-Khwair Area in Oman". WOCN2007 proceeding. July 2, 3 and 4, 2007, Grand Hyatt Singapore.

11. Zia Nadir, Nazar El Fadhil, Md, Abdus Salam, "Performance evaluation and statistical analysis of TEM/GTEM cells at high frequencies" Proceeding 2nd annual International conference on Electrical Engineering/ Electronics, Computer, Telecommunications and Information Technology (ECTI-CON2005), Pattaya, pp. 807-810 -Thailand, 12- 13 May, 2005.

12. Nazar. "Graphical and Digital signature Combination for fulfilling the cultural gap between traditional signature and current smart card digital certificate/signature" Proceeding of 3rd annual conference in Privacy, Security, and Trust (PST2005). Volume 1, p.p. 61-65. October 12-14, 2005, the Fairmont Algonquin, St. Andrews, New Brunswick, Canada.

13. Nazar. Elfadhil, M.A. salam, A. Al-Lawati, O. Al-Qasmi, M. Al-Gheithi and Z. Nadir "Modification Of An Open Area Okumura-Hata Propagation Model Suitable For Oman" Proceeding of TENCON2005, p.p. 2007-2010, Melbourne, 21-24 November 2005, Australia.

14. Nazar E. Mohamed, Z. Nadir, M. A. Salam. "Signal Strength Prediction for reliable cellular network design by using path loss". Proceeding of First international conference on wireless and optical communication networks (WCON). Oman June 2004. Vol. 1, pp. 284-287.

15. M. Salam, Nazar. Mohammad, Z. Nadir, A. Maqrashi, A. Al Kaf. "Measurement of Conductivity and Equivalent Salt Deposit Density of Contaminated Glass Plate" Proceeding of IEEE Region 10 International Conference on Electrical & Electronic Technology (IEEE-TENCON2004). Volume C, p.p. 268-270. Thailand, Dec. 2004.

16. Nazar. "Kohonen Self Organizing Maps Neural Network, K-means algorithm, and Expert System for HIV Blood Clustering". Proceeding of IEEE Region 10 International Conference on Electrical & Electronic Technology (TENCON 2001). Vol. 1, pp. 174-181. Singapore 19-22 August 2001.

17. Nazar. "Kohonen Self-Organizing Neural Networks & Expert System for Disk Performance Recognition". Proceeding of International Conference 2002:"Internet Economy and Business". Vol. 1, pp. 18-23. Malaysia, September 17-18, 2002.

18. Nazar. "Kohonen Self Organizing Neural Expert System for Network Performance Management Prediction". Proceeding International Conference on Artificial & Computational Intelligence for Decision, Control & Automation in Engineering & Applications (ACIDCA'2000) Tunisia, pp. 65-68, Mar. 2000.

19. Nazar. "An Approach for Automating Knowledge Acquisition Process by Using Kohonen Self-Organizing Neural

Networks & Expert System". Proceeding of the First International Conference on Mechatronics (ICOM'01), Malaysia- 2001. Vol. 2, pp. 550-560.

20. Nazar. "A smart System for Network Performance Prediction". Proceeding International Wireless and Telecommunications Symposium (IWTS2000) Malaysia, pp. 765 – 768, May 2000.

21. Nazar. "Neural expert system for network performance management". Proceeding of IEEE International Symposium on Intelligent Signal Processing and Communication Systems (ISPACS'99), Thailand, pp. 765 – 768, Dec. 1999.

22. Nazar "Integration of neural network and expert system for automated knowledge acquisition". Proceeding of Malaysia Science and Technology Congress' 98, Symposium C: Computer sciences and Information Technology 10-11 November 1998, Pulua Pinang, Malaysia.

List of Thesis, Reports and other publications (6 articles)

1. Nazar, "Digital gap and how to minimize it in the Arabic world". An Arabic article for Al-masar newspaper, public relation and publicity department. Sultan Qaboos University, 30 - March 2005.

2. Automated Knowledge Acquisition Based on Unsupervised Neural Network & Expert System Paradigms. Report submitted to University Technology Malaysia. Oct. 2001.

3. Fulfilling the cultural gap between traditional signature and smart card digital certificate/signature", Report submitted to SQU, June. 2008.

4. "Automated Knowledge Acquisition Based on Unsupervised Neural Network & Expert System Paradigms". University of Technology Malaysia: PhD thesis, July 2001.

5. "Generation and Verification of Digital Certificate in Local Area Network". University of Technology Malaysia: Master of computer science thesis, Sept. 1997.

6. "Design & Developing of Television Troubleshooting & Maintenance Device". University of Gezira: BSc.(Hon.) dissertation, September 1993.

List of Invited SPEAKERS (Tutorials & Key note speaker)

1. "Knowledge Acquisition and Learning Strategies Challenges". 3rd Workshop on Data and Knowledge Engineering (WoDAKE3-15), King Abdulaziz City of Science and Technology, King Abdulaziz University, Jeddah, Saudi Arabia, Dec. 2015.

2. "Machine Learning: An Automated Knowledge Extraction Challenges & Approaches". Workshop on Data and Knowledge Engineering (WoDAKE14), King Abdulaziz City of Science and Technology, King Abdulaziz University, Jeddah, Saudi Arabia, 23rd of November 2014.

3. "Evolutions in Mobility, wired and wireless communication networks". IFIP/IEEE ICI2006, panel session-Tashkent, Uzbekistan. September 2006.

4. "A Secure Foundation for Mobile Payments" IEEE-WOCN2006, The third IEEE and IFIP International Conference on wireless and Optical Communications Networks.   The Next Generation of Mobile, Wireless and Optical Communications Networks.   Information and Communications Technologies and Application to E- and M- Commerce. April 11, 12 and 13, 2006, Bangalore, India

5. "INTERNET - A Secure Foundation for Mobile Payments". The First IFIP International Conference in Central Asia on Internet The Next Generation of Mobile, Wireless and Optical Communications Networks   Information and Communications Technologies and Application to E- and M- Commerce September 26 - 28, 2005 Hyatt Regency Hotel, Bishkek, Kyrgyz Republic.

6. ". Tutorial – 1 – T1: A Secure Foundation for M- and E-Commerce". First IFIP International Conference on Wireless and Optical Communications Networks WOCN 2005, March 6 - 8, 2005, Hyatt Regency Hotel, Dubai, United Arab Emirates UAE.

7. " Tutorial – 3 – T3: Internet – A Foundation for M- and E-Commerce". First IFIP International Conference on Wireless and Optical Communications Networks WOCN 2004 June 7-9, 2004, Sultan Qaboos University Muscat, Oman.

Appendix B

List of citations
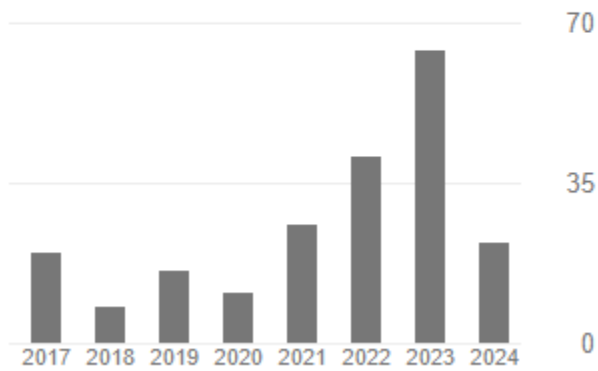
Appendix C

Taught courses and modules:

- **Graduate Courses**
  - Advanced Network Security
  - Advanced Management Information System
  - Advanced Embedded System
  - Computer Security
  - Infomation Security
  - Programmable System on Chip
  - Advanced Computer Architecture
  - Neural network and Machine Learning Applications
  - Selected Topics in Computer Security
  - Robotics
  - Designing Software Systems
  - Digital Image Processing
  - Simulation and Modeling
  -

- **Intelligence & Software Engineering Courses**
  - Software Engineering I & II
  - Information system analysis & design
  - Artificial Intelligence
  - DNA Computing

- **Telecommunication Engineering**
  - Principles of Telecommunication
  - Telecommunication systems
  - Digital Communications
  - Signal and systems

- **Network & Information Security Courses**
  - Network Security
  - Coding & Data encryption
  - Information Security & Privacy
  - Advanced Network Security
  - Biometrics systems
  - Advanced Management information System

- **Electrical & Computer Engineering Courses**
  - Selected topics in computer Engineering
  - Circuit Analysis I
  - Circuit Analysis II
  - Circuit & Systems
  - Computer Architecture and organization
  - Digital Signal Processing
  - Data structure & algorithms
  - Electronics

- **Short Courses & Training**
  - HP IT Essentials I & II training and preparation for certification exam.
  - Cisco CCNA I & CCNP training and preparation for certification exam
  - Ethical Computer Hacking
  - FPGA-Altera HDL Design Flow & Tools training
  - Max-plus Tutorial VHDL FPGA PLCD
  - FPGA development board usage for beginners.

- **Laboratory Sessions**
  - Developed logic design laboratory manual
  - Developed circuit & Systems laboratory manual.
  - Developed digital circuit analysis laboratory manual.
  - Developed Embedded System I laboratory manual.
  - Developed Embedded System II laboratory manual.
  - Developed DSP laboratory manual.
  - Developed DNA computing laboratory Manual
  - Developed Biometrics laboratory manual
  - Digital System Laboratory
  - Wireshark Laboratory

- **Digital Systems courses**
  - Digital Electronics & Testing
  - Digital logic design
  - Digital Circuit Analysis
  - Embedded System I & II
  - Advanced Computer Architecture
  - Embedded Systems
  - Advanced Embedded system

- **Programming Courses**
  - Java programming for Engineers
  - C/C++ programming for Engineers
  - Computer aided tools

Appendix D

Administrative Carrier History & Responsibilities

 FAHAD BIN SULTSN UNIVERSITY, SAUDI ARABIA
  A. **Jan. 2008 – Present**   **DEPARTMENT OF COMPUTER ENGINEERING,**

Commenced as Associated Professor

Responsibilities:
- o Use innovative methods and strategies, such as Moodle tool in teaching to ensure active learning by students.
- o Co-ordinate industrial project placements and summer internship.
- o Design module content, delivery methods and assessment procedures, utilising best practice systems and processes.
- o Developing course contents, syllabi, laboratory manuals, and self evaluation reports according to NCAAA criteria.
- o Developing and implementing quality assurance capstones.
- o Member of the College of Computing Accreditation Committee.
- o Prepare and present lectures in various modules at undergraduate and postgraduate levels.

Major Achievements:
- o Served in the following extra-curricular roles:
  - Undergraduate Admission Advisor
  - Convenor of Departmental and college Committee
  - College Representative on following Committees
  - Assist in accreditation and classification that held by Ministry of Civil services for computer engineering and computer science programs disciplines committees.
  - Assist and contribute in accreditation and classification that held by National Commission for Academic Accreditation & Assessment (NCAAA).
  - Summer internship schools in Malaysian and French universities advisor.

B. **B.1- Sept. 2010-Nov. 2010: Acting CHair person, Computer egnieering Dept.**

B.2- Sept. 2021- Present: Acting CHair person, Computer egnieering Dept.

Responsibilities:
- **Leadership**
  o Provide academic leadership in Computer Engineering discipline
  o Promote the interests and reputation of the department within the University and externally
  o Ensure that the activities of the department support the college's objectives
  o Lead entrepreneurial activity, developing income-generating activities

- **Research and Teaching**
  o Develop coherent departmental research strategies to deliver high quality research
  o Manage applications for research funding proactively
  o Collaboration with programme leaders and/or directors of teaching, to manage the delivery of the department's teaching programmes
  o Assure academic quality and standards through compliance with the University's quality assurance procedure
  o Chair the Teaching Committee for Computer Engineering. Responsibilities included implementation of teaching and learning policy, quality assurance of the academic standards and resolving any issues related to teaching and learning.

- **People Management**
  o Oversee the management of staff in the department, ensuring that their performance is monitored and that staff have opportunities for development and training, in accordance with University staffing and equal opportunities policies.
  o Allocate teaching and administrative duties appropriately
  o Oversee the recruitment, probation and mentoring of new staff in the department in accordance with University and college policies

- **Planning**
  o Contribute to setting objectives and priorities for the college and to formulating the college's business plan for resource allocation purposes

- **Resource Management**
  o Manage financial, staffing and other resources effectively and efficiently within the assigned budget and other agreed parameters, to ensure achievement of the college's strategy and compliance with financial and other controls
  o Ensure that the department fulfils its statutory responsibilities and observes the University's policies and procedures

- **Interdisciplinary**
  o Develop interdisciplinary activities with other departments of the Computing College.

- **Enterprise**
  o Establish departmental links with external agencies, such as professional bodies, research councils and other funding bodies, for the benefit of the department's teaching and research including the commercialisation of research.

- **Communication**
  o Communicate University and college policy to the department and departmental views to the University and college
  o Ensure effective and efficient communication within the department

Major Achievements:
- Served in the following extra-curricular roles:
  - Undergraduate Admission Advisor
  - Convenor of Departmental and college Committee
  - College Representative on following Committees
  - Assist in accreditation and classification that held by Ministry of Civil services for computer engineering and computer science programs disciplines committees.
  - Assist and contribute in accreditation and classification that held by National Commission for Academic Accreditation & Assessment (NCAAA).
  - Summer internship schools in Malaysian and French universities advisor.

C. Nov. 2010- Sept. 2021:   ACTING DEAN & ASSOCIATED PROFESSOR

Responsibilities:

- **Leadership**
  o   Provide overall academic leadership within the College and to coordinate the College strategic direction and integrate the College's interests into the overall College and university strategy.
  o   Provide academic leadership in Computer Science & Computer Engineering disciplines
  o   Promote the interests and reputation of the College within the University and externally
  o   Ensure that the activities of the College support the University's objectives
  o   Lead entrepreneurial activity, developing income-generating activities
  o   Play an active role in seeking resources that allow for the implementation of the College's strategic goals
  o   Chair the College Councils and the Faculty Forum
  o   Responsible, within overall College guidelines, for faculty members recruitment within the College; to chair (or delegate to chair) selection committees for academic and administrative staff appointments in Departments within the College; to establish selection committees for appointments within the Faculty
  o   A member of all search committees for Chair appointments in the College and to play an active role in the negotiations and appointment process for Chairs in the College in collaboration with Chairperson(s) of Department(s)
  o   A member of Council and relevant College committees, and/or appoint a delegate.
  o   A member of the Senior Promotions Committee.
  o   A member of the University Research Board.
  o   Support quality review and professional accreditation processes.

- **Research and Teaching**
  o   Develop coherent college research strategies to deliver high quality research
  o   Manage applications for research funding proactively
  o   Collaboration with programme leaders and/or directors of teaching, to manage the delivery of the college's teaching programmes
  o   Assure academic quality and standards through compliance with the University's quality assurance procedure
  o   Chair the Teaching Committee for Computing College. Responsibilities included implementation of teaching and learning policy, quality assurance of the academic standards and resolving any issues related to teaching and learning.

- **People Management**
  o   Oversee the management of staff in the college, ensuring that their performance is monitored and that staff have opportunities for development and training, in accordance with University staffing and equal opportunities policies.
  o   Allocate teaching and administrative duties appropriately
  o   Oversee the recruitment, probation and mentoring of new staff in the college's departments in accordance with University and college policies
  o   Have overall budgetary authority, accountability and responsibility for all budgets allocated in the College.

- **Planning**
  o   Contribute to setting objectives and priorities for the college and to formulating the college's business plan for resource allocation purposes

- **Resource Management**
  o   Manage financial, staffing and other resources effectively and efficiently within the assigned budget and other agreed parameters, to ensure achievement of the college's strategy and compliance with financial and other controls
  o   Ensure that the department fulfils its statutory responsibilities and observes the University's policies and procedures

- **Interdisciplinary**
  o   Develop interdisciplinary activities with other departments of the Computing College.

- **Enterprise**
  o   Establish college and departmental links with external agencies, such as professional bodies, research councils and other funding bodies, for the benefit of the college's teaching and research including the commercialisation of research.

- **Communication**
  - Communicate University and college policy to the departments and departmental and college views to the University
  - Ensure effective and efficient communication within the college and departments

Major Achievements:
- Developed an undergraduate programs in the following disciplines:
  - Information Technology bachelor program
  - Cyber security bachelor program
- Developed graduate programs in the following disciplines:
  - Master of science in computer science
  - Master of science in computer engineering
- Undergraduate Admission Advisor
- Convenor of Departmental and college Committee
- College Representative on following Committees
- Assist in accreditation and classification that held by Ministry of Civil services for computer engineering and computer science programs disciplines committees.
- Assist and contribute in accreditation and classification that held by National Commission for Academic Accreditation & Assessment (NCAAA).
- Summer internship schools in Malaysian and French universities advisor.
- Prepared a Bachelor's program in Information Technology.
- Facilitate signing process of MOUs between FBSU and each of the following academic institutions:
- University of Technology Malaysia (UTM),
- International Islamic University of Malaysia (IIUM)
- Established the FBSU Cisco Academy
- Ranked first in the first conference, sixth in the second conference, and fifth and sixth in the third conference
- Improved the student-faculty ratio.
- Improved the quality of student advising.
- Recruited a qualified body of faculty members.
- Revised the FBSU Academic Manual and the FBSU Catalogue annually
- Obtained scholarships for FBSU students to do internships in the Robotic Research laboratories in the University of Versailles in France.
- Initiated female's student summer training in universities in Malaysia.

- **Aug 2003 – Aug 2008:   Department Of Computer Engineering, Faculty Of Engineerig, Sultan Qaboos University, Oman**

    o **Assistance Professor in Computer Engineering**

    Major Achievements:
    - Introduced technology mediated learning to a well established course, such as Digital logic design and Digital Electronics.
    - Member of the Teaching Committee for Computer Engineering. Responsibilities included implementation of teaching and learning policy, quality assurance of the academic standards and resolving any issues related to teaching and learning.
    - Supervised several undergraduate and postgraduate students' projects and dissertations, respectively.
    - Co ordinate IEEE Student Branch at SQU, Oman (2007-2008)
    - Use innovative methods and strategies, such as Web Course Tools (WebCT) in teaching to ensure active learning by students.
    - Co-ordinate industrial project placements and summer internship.
    - Design module content, delivery methods and assessment procedures, utilising best practice systems and processes.
    - Developing course contents, syllabi, laboratory manuals, and self evaluation reports according to ABET criteria.
    - Developing and implementing quality assurance capstones.
    - Member of the College of Engineering Accreditation Committee
    - Assist in ABET accreditation for Electrical & Computer Engineering Programs.
    - Developing laboratory sessions according to ABET criteria.
    - Member, Strategic Planning Committee, SQU-Oman.

- **Jan 2001 – Aug 2003:   School Of Computer Emgineering, Notingham University, Malaysia**

    o **Assistance Professor in Computer Engineering**

    Major Achievements:
    - Awarded further responsibility for administering undergraduate admissions and advising. This entailed responding to student admission queries, advising on admission procedure and informing the students about the outcomes of their application. A positive and engaging approach ensured strong student buy-in.
    - Involve in facilitating industrial collaboration committee.
    - Involve in facilitating Strategic Planning Committee.
    - Supervised several undergraduate students' projects.
    - Attend training sessions for Post Graduate Certificate in Higher Education (PGCHE); Nottingham University.

Appendix E

Professional Activities & Community Services

- **Special Committee / Consultancy / Association Memberships**

  - IEEE member (1998- 2012)
  - New Zealand Registered Engineering Associates (REA), in process Certified lecturer
  - in higher education institutes, Malaysia (2001- present) United Nation Development
  - Program (UNDP) Sudan Token 2013.
  - United Nations Children's Fund (UNICEF)-1994-1996.
  - World Food Program (WFP)- 1994-1996.
  - Save the Children Fund (SCF)- 1994-1996.
  - Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ) -1994-1996. Drought
  - Recovery and Food Security project-1994-1996.

- **Speaking Engagements**

  - "Knowledge Acquisition and Learning Strategies Challenges". 3rd Workshop on Data and Knowledge Engineering (WoDAKE3-15), King Abdulaziz City of Science and Technology, King Abdulaziz University, Jeddah, Saudi Arabia, Dec. 2015.

  - "Machine Learning: An Automated Knowledge Extraction Challenges & Approaches". Workshop on Data and Knowledge Engineering (WoDAKE14), King Abdulaziz City of Science and Technology, King Abdulaziz University, Jeddah, Saudi Arabia, 23rd of November 2014.

  - INVITED SPEAKER –Evolutions in Mobility, wired and wireless communication networks. IFIP/IEEE ICI2006, panel session-Tashkent, Uzbekistan. September 2006

  - INVITED SPEAKER –IEEE-WOCN2006, The third IEEE and IFIP International Conference on wireless and Optical Communications Networks.   The Next Generation of Mobile, Wireless and Optical Communications Networks. Information and Communications Technologies and Application to E- and M- Commerce. April 11, 12 and 13, 2006, Bangalore, India

  - INVITED SPEAKER – A Secure Foundation for Mobile Payments. The First IFIP International Conference in Central Asia on Internet The Next Generation of Mobile, Wireless and Optical Communications Networks Information and Communications Technologies and Application to E- and M- Commerce September 26 -
28, 2005 Hyatt Regency Hotel, Bishkek, Kyrgyz Republic.

  - INVITED SPEAKER –A Secure Foundation for M- and E-Commerce. First IFIP International Conference on Wireless and Optical Communications Networks WOCN 2005, March 6 - 8, 2005, Hyatt Regency Hotel, Dubai, United Arab Emirates UAE.

  - INVITED SPEAKER –A Foundation for M- and E-Commerce. First IFIP International Conference on Wireless and Optical Communications Networks WOCN 2004 June 7-9, 2004, Sultan Qaboos University Muscat, Oman.

- **Editorial / Specialist Advisor**

  - **REGULAR REVIEWER** – various international journals with high citation rate such as:

    - American Research Journal of Computer Science and Information Technology.
    - Journal of Network and Computer Applications (JNCA).
    - IEEE Transactions on Knowledge and Data Engineering (IEEE-TKDE).
    - Journal of Software Engineering, and Knowledge Engineering (JSEKE).
    - Journal of Engineering Research (TJER), SQU.

  - **REGULAR REVIEWER & COMMITTEE MEMBER** – various international indexed conference such as:

    - Chair - the 5th International Conference on Robotics, Mechanics and Mechatronics (ICRMM 2018)
    - member-the 2019 10th international conference on mechatronics and manufacturing(2009-2019)
    - MEMBER –International Conference on Wireless and Optical Communications Networks (2004-present)
    - MEMBER –International Conference on Application of Information and Communication Technologies (2009-present).

o MEMBER – 4th international Conference on Manufacturing and Industrial Engineering, (2015).
o MEMBER –3rd International Conference on Intelligent Information Systems and Management (2012).
o MEMBER –24th International Conference on Computer Applications in Industry and Engineering (2011).
o MEMBER –Asian Himalayas International Conference on Internet (2011).
o MEMBER –IEEE-IEE International Conference on Communication Computer & Power (2007).
o MEMBER –International Conference on Advanced Communication Technology, (2005).
o MEMBER –IEEE-IEE International Conf. on Communication Computer and Power,(2005).
o MEMBER –International Conference on Advanced Communication Technology (2004).

Appendix F

Statement of Research Philosophy

☐ **Prelude**

My research interests have revolved around several areas; among them: (1) Telecommunication, (2) Medical Engineering, (3) wireless sensor network, (4) Machine learning (automated knowledge acquisition), and (5) Digital systems. Worth to mention that, my thesis work focused specifically on machine learning, it is presents an approach for automated knowledge acquisition based on unsupervised neural network & expert system paradigms. The extracted knowledge in terms of rules will be used as knowledge base for an expert system.

☐ **Summary of Previous and Ongoing Work**

This is section provide a brief descriptions for my previous and ongoing research. My research philosophy revolves around the belief that successful research themes have to demonstrate a novel and interesting approach to feasible research problems and themes, and usability and applicability as well.

o **Machine Learning:**

In recent years, decision-making have become more complex. Consequently, knowledge based decision making systems have been developed to aid us in solving complex problems. Nevertheless, the knowledge base itself has become the bottleneck, as it is the part of the system that is still being developed manually. Nonetheless, as the size and complexity of the problems increase, and experts become scarce, the manual extraction of knowledge becomes very difficult. Hence, it is imperative that the task of knowledge extraction be automated. The demand for automated knowledge extraction system has increased dramatically. These automated systems should be able to acquire appropriate knowledge from available sources, make sound and reliable decisions, and explain the reasons for conclusions or decisions reached. The previous approaches for automated knowledge extraction are based on decision trees, progressive rule generation, and supervised neural networks. All the above-mentioned approaches are supervised learning methods, requiring training examples combined with their target output values. In real world cases, target data is not always known, so as to be provided the system with data at the start of training. The similarity of input patterns can be used as the criterion for clustering the input data. The Euclidean distance between two patterns provides a measure of this similarity. This kind of clustering can also be used to carry out cluster discovery since the clusters are not known in advance. The learning method determines the clusters by itself, without prior information about the possible number and nature of clusters. The paper approach is capable to clearly cluster the nodes in certain groups and acquire the knowledge implicit in each cluster by providing symbolic rules that representing the produced clusters.

o **Mobile Telecommunication research that examines the applicability of Okumura-Hata model in Oman, Saudi, and Malaysia in GSM frequency band.**

The study was carried out for open area and urban areas OF Oman and Malaysia only. The mean square error (MSE) was calculated between measured path loss values and those predicated on the basis of Okumura-Hata model for an open area. The MSE is up to 6dB, which is an acceptable value for the signal prediction. Therefore, the model gave a significant difference in an open area that allowed necessary changes to be introduced in the model. These can be related to the environmental effects of the places selected. That error was minimized by subtracting the calculated MSE from the original equation of open area for Okumura-Hata model. Modified equation was also re-verified for another cell in an open area in Oman and gave acceptable results.

o **Medical Engineering: (Identification of Patients with Congestive Heart Failure Using Different Neural Networks Approaches).**

A new technique for identification of patients with Congestive Heart Failure (CHF) from normal controls is investigated in this paper using spectral analysis and neural networks. The identification system consists of two parts: feature extraction part and classification/clustering part. The feature extraction part uses the method of approximate spectral density estimation of R-R-Intervals (RRI) data by implementing the soft decision sub-band decomposition technique. In the classification/ clustering part, two different methods of machine learning approaches with neural networks are implemented and compared in their performances. Those approaches were supervised neural network and unsupervised neural network.

o **Wireless Sensor Network: (A Voting Median Base Algorithm for the Approximate Performance Monitoring of Wireless Sensor Networks).**

One of the main obstacles in using Wireless Sensor Networks in many applications is the reliability of its collected data. Unfortunately, in Wireless Sensor Networks, this reliability varies during the network's operation due to frequent changes in the operation of its nodes. These frequent changes, not only affect the data's reliability, but make the data that are collected, in some cases, meaningless. As a result, the functionality of Wireless Sensor Network nodes should be monitored during the network's operation in order to ensure that the operation is highly efficient and that the collected data are of high quality. The work in this paper proposes a new passive performance algorithm that can detect these frequent changes, test their impact on the network's functionality and isolate the suspected nodes from the neighbourhood operation. In addition, the paper discusses some of the outcomes of empirical experiments carried out using the proposed algorithm when it was implemented on a Mote Lab-size test-bed. These results agreed with previous outcomes obtained from simulation/analytical experiments. Moreover, these experiments showed that the proposed algorithm, not only achieved a high-level of detection of functionality degradation in the network, but was also resilient to both high packet loss and environmental changes.

o **Digital Systems for Vehicle communications during accidents:**

In many locations, the number of vehicle accidents increases every year. The accidents are due to any number of factors, including, but not limited to: vehicle malfunction, road maintenance, and human error. Since the reasons for an accident vary to such a large extent, the community has found it difficult to develop a standard system to reduce or prevent all forms of accidents. Human error accounts for the vast majority of accidents. Therefore, it would be favorable to develop ways to reduce or prevent such errors.

o **Information Security:**

This research area proposal develops the concept of integrating a smart card and visual and digital signature into an overall PKI in Oman. The purpose of this proposed solution is to fulfil the cultural gap between traditional digital signatures and current smart card digital certificate/signature through the integration of culturally relevant built-in features for increasing the acceptability of digital signatures and smart cards in global e-government, while maintaining the security features of current digital signature/certificate schemes. The paper contribution will be mainly in two areas; namely: modified the X.509 authentication information extension, and added the visual and digital signature capability.

o **Embedded Systems Pedagogical Issue:** Teaching Approaches, Students Readiness, and Design Challenges

Several researchers thought defined engineering practice as multidisciplinary by nature. While engineering projects may require discipline specific specialists, the vast majority of engineering practice is carried out either by an engineering team of mixed disciplines, or by individual engineers who are competent across multiple fields. Blurring of the disciplines is a common requirement in engineering practice where budgets do not allow for a large staff.

Meanwhile, they believe that engineering education is a continuing process not only in developing countries but also in developed countries. There has been increasing interest and concern focused on the teaching and graduating engineers in various disciplines. The demand for a proper engineering education has increased steadily as a result of the rapid socio-economic development and environmental consciousness in the country. As the population of the country expands industrial expansion and demands change, besides contributing to rising number of graduate engineers, the strains places on qualified faculty members also increase). It will be a challenge for university and institute's administrations to meet the increasing demands for reliable high quality graduate engineers. As a result, proper engineering education systems shall be planned to accommodate the population increase and to avoid qualified engineers shortages that may disrupt economic and education upbringing activities.

Appendix G

Statement of Teaching Philosophy

My first academic teaching experience began in my first undergraduate year when I have been selected to tutor the weaker secondary students. Such tutoring activities through my academic career have slowly developed the "teacher" in me. I firmly believe that the best way to learn is to teach and one continues to learn all through one's life. In addition to faculty input, and discussions with colleagues, my students' responses are the best source for improving my teaching techniques, which are evolving on a continuous basis. Understanding how people learn is one of the significant aspects of teaching. This is linked to their "knowledge" background and maturity. It was an interesting experience when I was trying to explain my scientific research to my students and colleagues.

My main goal is to encourage independent thinking and analytical reasoning to augment their problem solving skills, thus encouraging them to not just memorize. I prompt them to question at every stage: "why? How?" and satisfy their curiosity, instead of assuming the instructor is always right. Computer engineering also involves a significant amount of teamwork. Several industries/companies where students find employment emphasize the need for a "team player with good interpersonal skills". For this purpose, I strongly advocate design projects involving student groups, which provide students with vital opportunities to effectively work as a team. These projects are useful learning tools where the students assimilate and implement all the concepts they have learned in the classroom to bring the project to fruition, write a report and make a presentation.

In addition, a good teacher needs to personalize the needs and problems of the students. This is observed in case of a few of the weaker, shy. In my opinion, identifying the students by their full names and knowing some background information is very beneficial. I obtain most of this information subtly through my numerous interactions with them during my office hours and outdoor activities.

A good teacher should have sound fundamentals and command over the concepts as well as a broad knowledge beyond the realms of the particular course being taught. Thus, he/she can provide useful inter- disciplinary examples, which make learning very interesting and motivates the students. Good course

material with sufficient problems/examples and case studies is very effective. While advance preparation is essential, I believe that there should be enough room for flexibility and I tend to adapt to the requirements as the course proceeds. This was especially true in case of open-ended design projects where the material was modified appropriately depending on the group's performance. Technology is very useful and should be utilized effectively. I feel that "seeing believes" and so audio-visual aids like using power point slides for lectures, providing hand outs, and using WebCT/Moodle are effective learning tools with proven impacts.

Worth to mention that, I have been very fortunate to work and served several reputable universities; among them, Nottingham University, International Islamic University Malaysia, Sultan Qaboos university, and Fahad Bin Sultan University. Such diversity experiences have shaped my own teaching philosophy. Nevertheless, several personal teaching assumptions were re-examined and force me to adapt a continual renewal process whenever required.

Finally, I believe that the role of a teacher is that of a leader where you have to show the path, motivate, encourage, and lead by example.

Appendix H

Developed Programs

1. Bachelor degree of Science in Computer Science program.
   The curriculum is designed to grant students the Bachelor of Computer Science degree upon the successful completion of the four-year program.

2. Bachelor degree of Science in Computer Engineering program.
   The CEN curriculum is a four-year program designed to grant students the Bachelor of Engineering Sciences (BES) degree upon the successful completion of the requirements. The first common year with College of Engineering majors allows students to switch between the engineering majors at the start of the second year of their study.

3. Bachelor degree of Science in Information Technology program.
   This program is designed to grant students the Bachelor of Science in Information Technology degree upon the successful completion of the four-year program thereof.

4. Master of Science in Computer Engineering program.
   The Master of Computer Engineering curriculum is a two-year program designed to grant students the Master of Engineering in Computer Engineering upon the successful completion of the requirements. The Master of Computer Engineering program composed of one track; namely: Computer Networks. In the first year; the pupils study the required core courses, then in the second year students are allowed to determine which track elective they prefer to concentrate on right after their first year along with writing project distributed in the last two terms of the program.

5. Master of Science in Computer Science program.
   The Master of Computer Science curriculum is a two-year program designed to grant students the Master of Science in Computer Science upon the successful completion of the requirements. In the first year; the student study the required core courses, then in the second year students are allowed to determine which electives they prefer along with writing project or thesis that distributed in the last two terms of the program.

Appendix I

Postgraduate Research Supervision
Master thesis and dissertations

No	Title	Date
1	Anomaly Detection in IOT-Based ICU Using Machine Learning and Feature Engineering Algorithms	2023
2	Tri-ALU design for general purpose and machine learning applications.	2023
3	Path los determination for Tabuk city	2023
4	Automated system for sleep Apnea Detection	2022
5	Automated Question Answering System For Faq Covid-19 Using Word Embeddings Comparative Studies	2021
6	An Enhancement of Hierarchical Clustering Algorithms	2021
7	Face Emotion Recognition Using Machine Learning and Transfer Learning Method	2021
8	Highly Secure Steganography-Based System With Three Layers Of Protection	2021
9	A Comparative Performance Evaluation of IPv4/IPv6 Using Network Simulation and Virtualization Tools	2021
10	Cybersecurity Awareness Level: The Case of Saudi Arabia University Students.	2020
11	Face Recognition System Approach Based on Neural Networks and Discrete Wavelet Transform.	2020
12	Support Vector Machine for Medical Image Classification of Tumorous.	2020
13	Biometric Authentication by Using Fingerprint Recognition System	2020