Curriculum Vitae

Mustafa A. Al-Fayoumi, Ph.D



Associate Professor of Computer Science Chairman of Cybersecurity Department King Hussein School for Computing Sciences Princess Sumaya University for Technology *P.O.Box 1438 Al-Jubaiha - Amman, 11941 Jordan* Office: +962 6 5359 949 Ext: 5302 Fax: +962 6 534 7295 Mobile: +962 78 0354646 Email: <u>m.alfayoumi@psut.edu.jo</u> <u>fayoumi66@yahoo.com</u>

Personal Details

Family Name	: Al-Fayoumi
First Name	: Mustafa Ahmad
Date of birth	: Oct. 19, 1966
Gender	: Male
Nationality	: Jordanian
Marital status	: Married

Overview

- Dr. Mustafa Al-Fayoumi has more than 10 years' experience in mobile networking security systems research and development
- I have a strong background in modeling, simulation and analysis of mobile networks.
- He has a strong background in designing and improving cryptography algorithms (Public-Key Cryptography).
- He has a good experience of Master and PhD supervision
- He has experience in curriculum development for bachelor's and master's degrees in computer science, network security and information systems.
- He has a practical experience in the field of Quality Assurance and accreditation in Higher Education.
 - He has led the college strategic plans to achieve total quality assurance.
 - He has led the college compliance system with ABET (Accreditation board of Engineering and Technology - USA), NCAAA (National Commission for Academic Accreditation & Assessment – Saudi Arabia) accreditation.

Languages

Arabic: Mother tongueEnglish: Fluent

Academic degrees

2005-2009

Degree	: (Ph.D.) in Computer Science
Faculty	: Science and Technology/ Dept. of Computing and Technology
Institution	: Anglia Ruskin University, Chelmsford/Essex- UK
Final Result	: I have been granted the PhD degree directly without amendments
	(Distinction PhD)
Conclusion	: 09, February 2009
Thesis Title	: Security Performance Analysis and Enhancement of wireless
	Authentication Protocol Based on Digital Signature Scheme

2000-2003

Degree	: (M.Sc.) Master in Computer Science
Faculty	: King Abdullah II School for IT/Dept. of Computer Science
Institution	: Jordan University, Jordan
Final mark	: Very Good average grade
Conclusion	: July 2003

1984-1988

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Training Certificate and Other Qualifications

- One Year course in "Professional training for University Graduate Teachers of Computer in the Preparatory cycle" 1994, UNRWA/UNESCO Institute of Education, Amman, Jordan.
- Oracle DBA, Nov.1999, Amman, Jordan (5 Days).
- Oracle Developer, Nov.1999, Amman, Jordan (15 Days).
- Oracle Designer, Dec. 1999, Amman, Jordan (15 Days).
- IEEE, EBSCO, IGI, Oct. 29, 2015, Prince Sattam Bin Abdulaziz University, KSA.

Technical skills

- **Programming languages:** C, C++, Basic and Visual Basic, Java, Pascal, FORTRAN.
- Web technologies: Front Page & HTML
- Databases: Oracle
- Software: OpenGL, Flash
- Computing platforms: Linux/Unix, Windows

Professional experience

Sept, 2022- Present	Chairman Department of Cybersecurity King Hussein School for Computing Sciences Princess Sumaya University for Technology, Jordan
Sept. 2017- 2021:	<i>Vice Dean</i> King Hussein School for Computing Sciences Princess Sumaya University for Technology, Jordan
Sept.2016-Present:	Associate Professor Department of Computer Science King Hussein School for Computing Sciences Princess Sumaya University for Technology, Jordan
Sept.2015- Sept.2016:	Associate Professor Department of Computer Science College of Computer Engineering and Sciences Prince Sattam bin Abdulaziz University, Saudi Arabia
Feb. 2015- Sept.2016:	Dean's Assistant for Development and Quality College of Computer Engineering and Sciences Prince Sattam bin Abdulaziz University, Saudi Arabia
Sept. 2011-Feb. 2015:	Chairman Department of Computer Science College of Computer Engineering and Sciences Prince Sattam bin Abdulaziz University, Saudi Arabia
Sept. 2010-sept.2015:	Assistant Professor Department of Computer Science College of Computer Engineering and Sciences Prince Sattam bin Abdulaziz University, Saudi Arabia
Sept. 2010-Present:	<i>Part Time Assistant Professor</i> Department of ITC Arab Open University, Saudi Arabia Branch
Feb. 2009-Sept. 2010:	Assistant Professor Department of Computer Information System Faculty of Science and IT Al-Zaytoonah University, Amman- Jordan
Oct. 2003 – Sep. 2005:	<i>Computer Instructor</i> Department of Computer Information System Faculty of Science and IT Al-Zaytoonah University, Amman-Jordan
Sep. 1992 – Oct. 2003:	<i>Computer Teacher</i> UNRWA, Amman-Jordan
Feb. 1991 – Aug. 1992:	Computer Teacher

Nov. 1988 - Oct. 1990:

Ministry of Education, Jordan

Programmer & System Analyst

Computer City, Amman-Jordan

A. Teaching and Education

A.1 Princess Sumaya University for Technology (PSUT)

Code	Course Name	Level
11102	Introduction to Computer Science	First Year
11335	Operating Systems	Third Year
11425	11425Introduction to Software EngineeringFourth Year	
11464	11464 Information Systems Security	
11732Information SecurityMaster P		Master Program
11769 Cryptography Master		Master Program
11924 Data Cryptography		PhD Program

A.2 Prince Sattam bin Abdulaziz University (PSAU)

Code	Course Name	Level
CS1111	Computer Skills I	First Year
CS1301	Programming Language with C++	Second Year
CS3501	Artificial Intelligence	Third year
CS3601	Computer Graphics	Third year
CS3701	Operating Systems	Third year
CS3801	Computer Security	Third year
CS4831	Mobile Computing	Fourth Year
CS4911 Graduation Projects I F		Fourth Year
CS4921 Graduation Projects II Fourth		Fourth Year
CS4821	Cryptography	Fourth Year
CE3711	Computer Networks	Third year
IS3321	Advanced Quantitative Analyses	Third year
IS4911	Graduation Projects I	Fourth Year
IS4921	Graduation Projects II	Fourth Year

Code	Course Name	Level	
M150A	Data, Computing and Information	First Year	
M150B	Data, Computing and Information	First Year	
T175A	Networked living: exploring information and communication technologies	First Year	
T175B	Networked living: exploring information and communication technologies	First Year	
T209A	ICTs: People and Interactions Second Year		
T209B	T209B ICTs: People and InteractionsSecond Yea		
T224	Computers and Processors	Second Year	
T324	T324Keeping ahead in ICTsThird year		
T325	Technologies for Digital Media	Third year	
T471	Telematics-Project	Fourth Year	

A.3 Arab Open University (AOU)

A.4 Al-Zaytoonah University

Code	Course Name	Level
102102	Computer Skills 1	First Year
102107	Essentials of Internet	First Year
107101	1 Information Technology and Society First Year	
107210	0 Object Oriented Programming (1) Second Year	
107231	107231Information SecuritySecond Year	
107312	107312 Website Design Third year	
107341	107341 Computer Graphics and its applications Third year	
107361	107361 Artificial Intelligence and Expert SystemsThird year	

A.5 List of Thesis/Dissertation/Projects/Undergraduate Projects Supervised

A.5.1 Post-Graduate: Thesis

No.	Title	Student's Name	Level	Universit y	Status
1	Enhanced Collision Resolution Algorithm for IEEE 802.11 Distributed Coordination Function	Thaeer Ali Mahmoud Kobbaey	PhD/2 nd Supervisor	De Montfort University/ UK	Graduated/ 2018
2	Enhancing the Substitution Box's functionality in a Symmetric cryptography using a Dynamic technique.	Zaina Al- Saqqa	Master/1 st Supervisor	PSUT	Graduated/ 2018
3	An Enterprise BYOD Security Framework	Tareq Alqhawanmeh	Master/1 st Supervisor	PSUT	Graduated/ 2019
4	Security Performance Analysis and Enhancement of authentication and Key Agreement Protocol for LTE Networks	Areej Mohammad	Master/1 st Supervisor	PSUT	Graduated/ 2018
5	A Scalable Quality and Testing Platform for Critical Applications in the Cloud (SQTL)	Ruba Mohammad Haj Hamad	Master/1 st Supervisor	PSUT	Graduated/ 2019
6	Cyber Threat Intelligence Using Deep Learning to Detect Abnormal Network Behavior	Mohammad Alfawareh	Master/1 st Supervisor	PSUT	Graduated/ 2019
7	Using asymmetric encryption algorithm to enhance AES security by dynamic S-Boxes	Ahmed Hambouz	Master/1 st Supervisor	PSUT	Graduated/ 2022
8	VPN and Non VPN traffic Classification	Yosef Shaheen	Master/1 st Supervisor	PSUT	Graduated/ 2022
9	A Multilayer Perceptron (MLP) Inspired New Approach for Fast Data Symmetric Cryptography	Rashed Hama din	Master/1 st Supervisor	PSUT	Graduated/ 2021

A.5.2 Post-Graduate: Projects

No.	Title	Student's Name	Level	University	Status
1	Towards Detecting and Classifying Online Criminal Activities	Julia Saleh Goussous	Master/1 st Supervisor	PSUT	Completed
2	Detecting Network Anomalies using Rule-based machine learning within SNMP-MIB dataset	Abdalrahman Hwoij	Master/1 st Supervisor	PSUT	Completed

3	Extracting Significant Phishing Attacks Characteristics Using Filter Feature Selection Project	Mohammed Shatnawi	Master/1 st Supervisor	PSUT	Completed
4	Rapid Detection of Phishing URLs Using Machine Learning	Maria Alabbadi	Master/1 st Supervisor	PSUT	Completed
5	Aztec Code Steganography	Yousef Shamieh	Master/1 st Supervisor	PSUT	Completed
6	A study of security aspects in Email protocol	Ibrahim Abuarja	Master/1 st Supervisor	PSUT	Completed

A.5.3 Undergraduate: Supervision of Final Year Student Projects

A.5.3.1 Prince Sattam Bin Abdulaziz University-PSAU

No.	Title	Student's Name Year		Status
1	Learning Management System (LMS) Online Exams System	Sultan Alajmy and Sultan Abdulaziz Al-Anazi 2010/2011		Completed
2	College of Computer Engineering and Sciences Web Site	Meshari Alaboudi	2012/2013	Completed
3	Work Flow System with Document Signing	Saad Nasser Bin Saleh, Abdulaziz Alqidhi and Abdulaziz Alhomidhi2012/2013		Completed
4	Real Estate Information System - REIS	Mohammed Al-Bilali and Ibrahim Al-jumaah 2012/2013		Completed
5	Smart Delivery	Meshari alharbi, Fayez Alshahrani and Muhammad Almotiry	2014/2015	Completed
6	Developing a Secure Authentication Protocol for Mobile Payment	Ali Saleh Alhumaid, Saleh Ahmad Alfraig and Abdulrhman Binyousef		Completed
*7	Security Performance Analysis and Enhancement of SSL/TLS Authentication Protocol	Nayef Elsalah, Hussein Elotabi 2015/2016		Completed
*8	Steganography Algorithm based on Key distribution in 8-bit color Image	Alwaleed Alfayez, Fahad Alsaif and Ahmad Almarhoom		Completed

* These projects have won the first and second prize in the first competition for the best graduation project at the college level (March 2016).

A.5.3.2 Arab Open University-AOU/ Saudi Branch-Selected Projects

No.	Title	Student's Name Year		Status
1	Traffic Density Monitoring Project	Mohamed Abouabed, Hatim Alghamdi		
2	Online Payment Application	Omar A. AlSadoon	2011/2012	Completed
3	Authentication Protocol for UMTS Mobile Networks	Abdulaziz Al-Humaizi	2011/2012	Completed
4	Location Coordinates of Emergency Cases	Saud AlJaber and Faisal Abdulrahman Bin Salman 2013/2014		Completed

5	Detour Tracking & Report System	Mutaz Al-Mobaddal and Yasser Al-Orainy `	2013/2014	Completed
6	Multi Biometric authentication system for e-voting	Sultan Bin alyan, Ahmed Metawea, Yousef Ba-afeef		
7	My Order	Fahad Mohamed Aldrehimm & Abdullah Al Hasawi	2013/2014	Completed

A.5.3.3 Princess Sumaya University for Technology (PSUT)-Selected Projects

No.	Title	Student's Name Year		Status
1	Pay it Application	Refa't Badawi, Aseel Othman	2017/2018	Completed
2	Smart Pharmacy	Mahdi Al-Awadi, Amjad Hammoudeh, Ali Al- 2017/2018 Masaeed		Completed
3	E-Parliament	Amro Hani Hamzeh, Bara' Zuhair Obaid and Bara' Ismael Dabaj	Zuhair Obaid and 2018/2019	
4	Dragon Fire Game	Anas Sabbah and Walid Awwad	2018/2019	Completed
5	RFID	Karam M. Tayyem and Abdullah Abu Dhaim	2018/2019	Completed
6	Virtual Parking Management System	Mohamed Al-Ghazzawi, Muhammad Ibrahim and 2018/2019 Yaman Al-Ashkar		Completed
7	DeepFake Detection Method	Nawaf Abu Hassan and Obada Abdeen 2019/20		Completed

B. Research (Projects/Grants)

B.1 Research Area

 Information Security& privacy (Security Policies, Cryptography- public key cryptography, digital signatures, identification and authentication), Networks Security, E-Application. Mobile Networks, Simulation & Modeling, Algorithm analyzes & design.

B.2 Research Funding

No.	Project Title	Project Code	Project Role	Amount (RSU)	Status
1	Dynamic Authentication Protocol for Mobile Networks Using Public-Key Cryptography	<u>39/هـ/1432</u>	Leader	36000	Completed
2	A New Associative Classification Method Based on Incremental Mining	1433/ت/1	Member	44400	Completed

3	Design of performance aware routing metric for multi- channel multi-radio Wireless Mesh Networks	1807/01/2014	Member	42800	Completed
4	A Heterogeneous Scheme to Detect Intruder Attacks in WSNs (Wireless Sensor Networks)	4646/01/2015	Leader	42000	Completed

C. Publications

C.1 Journal Papers

- Qasem Abu Al-Haija, *Mustafa Al-Fayoumi*, "An intelligent identification and classification system for malicious uniform resource locators (URLs)". Neural Computer & Applications (2023). https://doi.org/10.1007/s00521-023-08592-z
- 2. Bushra Alhijawi, Mutaz Abo Alrub, and *Mustafa Al-Fayoumi*. "Generalized Ethereum Block chain-based recommender system framework". Information Systems, 111, (2023): 102113.
- **3.** *Mustafa Al-Fayoumi*, Ammar Odeh, Ismail Keshta, Ashraf Ahmad "Techniques of medical image encryption taxonomy". Bulletin of Electrical Engineering and Informatics, 11(4) (2022): 1990-1997.
- 4. Mohammad Al-Fawa'reh, *Mustafa Al-Fayoumi*, Shadi Nashwan, Salam Fraihat "Cyber threat intelligence using PCA-DNN model to detect abnormal network behavior". Egyptian Informatics Journal, 23(2), (2022): 173-185.
- 5. *Mustafa Al-Fayoumi*, Mohammad Al-Fawa'reh, and Shadi Nashwan. "VPN and Non-VPN Network Traffic Classification Using Time-Related Features". CMC-Computers Materials & Continua, 72(2), (2022): 3091-3111.
- 6. Thaeer Kobbaey, Raouf Hamzoui, Shakeel Ahmad, *Mustafa Al-Fayoumi*, Nikolaos Thomos, "Enhanced collision resolution and throughput analysis for the 802.11 distributed coordination function", International Journal of Communication Systems, 34(16), (2021): e4953.
- 7. Mohammad Al-Fawa'reh, Malik Qasaimeh, Ibrahim AbuArja, *Mustafa Al-Fayoumi*, "Mitigating Deep Learning Attacks Against Text Image CAPTCHA Using Arabic Scheme", International Journal on Communications Antenna and Propagation (IRECAP), 11(4), (2021): 288-296.
- Samar Al-Saqqa, *Mustafa Al-Fayoumi* and Malik Qasaimeh, "Intrusion Detection System for Malicious Traffic Using Evolutionary Search Algorithm", Recent Advances in Computer Science and Communications, Vol. 14, No. 5, Page (s): 1383-1391, 2021, https://doi.org/10.2174/2666255813999200821162547

- 9. Mohammad Al-Fawa'reh, Mustafa Al-Fayoumi, "Detecting Stealth-based Attacks in Large Campus Networks", International Journal of Advanced Trends in Computer Science and Engineering, Vol. 9, No. 4, Page (s): 4262-4277, 2020.
- 10. Yousef A. Yaseen, Malik Qasaimeh, Raad S. Al-Qassas and *Mustafa Al-Fayoumi*, "Email Fraud Attack Detection Using Hybrid Machine Learning Approach", Recent Patents on Computer Science, Vol. 12, No. 1, 2019. <u>https://doi.org/10.2174/2213275912666190617162707</u>.
- Mustafa Al-Fayoumi, Jaber Alwidian, Mohammad Abusaif, "Intelligent Association Classification Technique for Phishing Website Detection", Accepted at International Arab Journal of Information Technology (IAJIT), Vol. 17, No. 4, 2020.
- 12. *Mustafa Al-Fayoumi*, Ruba haj Hamad and Ja'afer Al Saraireh, "SSOAM: Automated Security Testing Framework for SOA Middleware in Banking Domain", Journal of Computer Science, Vol. 14, No. 7, Page(s): 957-968, 2018.
- Mustafa Al-Fayoumi, Shadi Nashwan, "Performance Analysis of SAP-NFC Protocol", International Journal of Communication Networks and Information Security (IJCNIS), Vol. 10, No. 1, Page(s): 125-130, April 2018.
- 14. Mustafa Al-Fayoumi, Malek Al-Zewairia, and Salam Hamdan, "A New Model of Multi-Key Generation for RFID Access Control System", International Arab Journal of Information Technology (IAJIT), Vol. 15, No. 3A, Page(s): 585-591, June, 2018.
- 15. Sattar Aboud, Mustafa Al-Fayoumi and Mohammad Al-Fayoumi, "Efficient E-Tickets Fare Scheme for Time-Typed Services", Accepted in Journal Internet Banking & Commerce, Vol. 22, No. 1, April, 2017.
- 16. Mustafa Al-Fayoumi, Yasir Ahmad, Usman Tariq, "A Heterogeneous Framework to Detect Intruder Attacks in Wireless Sensor Networks", International Journal of Advanced Computer Science and Applications Vol. 7, No. 12, January 2016. doi: 10.14569/IJACSA.2016.071207.
- Mustafa Al-Fayoumi, "DS-AKA: Dynamic and Secure Authentication and Key Agreement Protocol for UMTS Networks", International Journal of Scientific and Engineering Research (IJSER), Vol. 6, No. 2, Page(s): 1248-1257, February 2015.
- Usman Tariq, Abdullah Al Jumah, *Mustafa Al-Fayoumi*, "End-to-End Route Reliability in Pervasive Multi-Channel Multi-Radio (PMCMR) Scheme for MANETS", Journal of Applied Sciences, Vol. 15, No. 4, Page(s): 703-708, 2015. doi: 10.3923/jas.2015.703.708.
- 19. Mustafa Al-Fayoumi, Mohammed Alnababteh, Mohammad Daoud, Mohammad Alhawarat, "Dynamic Authentication Protocol for Mobile Networks Using Public-Key Cryptography", International Journal of Science and Research (IJSR), Vol. 4, Issues 1, January 2015.

- 20. Mustafa Al-Fayoumi, "Enhanced Associative classification based on incremental mining Algorithm (E-ACIM)", International Journal of Computer Science Issues (IJCSI), Vol. 12, Issues 1, Page(s): 124-130, January 2015.
- Mustafa Al-Fayoumi, Sattar Aboud and Mohammad Al-Fayoumi, "Comments on the Secure Identity-Typed Bilinear Pairing Scheme", published in Jökull Journal, Vol. 64, No. 9, Page(s): 57- 61, Sept. 2014.
- **22.** M. Alnababteh, M. *Al-Fayoumi*, A. Aljumah and J. Ababneh, "Associative Classification Based On Incremental Mining (ACIM)", International Journal of Computer Theory and Engineering (IJCTE), Vol. 6, No. 2, Page(s): 135-140, April 2014. doi: 10.7763/IJCTE. 2014.V6.851.
- 23. Mustafa Al-Fayoumi, Nidal Shilbayeh, "Cloning SIM Cards Usability Reduction in Mobile Networks", Springer's Journal of Network and Systems Management, Vol. 22, No.2: Page(s) 259-279, April 2014. doi: 10.1007/s10922-013-9299-8.
- 24. Mohammad Daoud, Aladdin Ayesh, *Mustafa Al-Fayoumi*, Adrian Hopgood, "Location Prediction based on a Sector Snapshot for Location-Based Services", Springer's Journal of Network and Systems Management, Vol. 22, No.1, Page(s):23-49, January 2014. doi:10.1007/s10922-012-9258-9.
- **25.** *Mustafa Al-Fayoumi*, Ja'afer Al-Saraireh, "An Enhancement of Authentication Protocol and Key Agreement (AKA) for 3G Mobile Networks", International Journal of Security (IJS), Vol. 5, Issue 1, 2011.
- 26. Mustafa Al-Fayoumi, Sattar Aboud and Mohammad Al-Fayoumi, "A New Digital Signature Scheme Based on Integer Factoring and Discrete Logarithm Problem", International Journal of Computer and Their Application (IJCA), Vol. 17, No. 2: Page(s) 1-8, June 2010.
- Mohammad Al-Fayoumi, Sattar Aboud and *Mustafa Al-Fayoumi*, "Practical E-Payment Scheme", International Journal of Computer Science Issues (IJCSI), Vol. 7, Issues 3, Pages: 18-23, May 2010.

C.2 Conferences Papers

- Mustafa Al-Fayoumi, Ahmad Elayyan, Ammar Odeh, Qasem Abu Al-Haija, "Tor network traffic classification using machine learning based on timerelated feature", 6th Smart Cities Symposium (SCS 2022), 2022 p. 92 – 97, DOI: <u>10.1049/icp.2023.0354</u>
- 2. Rana Abdulraheem, Ammar Odeh, *Mustafa Al-Fayoumi*, Ismail Keshta, "Efficient Email phishing detection using Machine learning," 2022 IEEE 12th Annual Computing and Communication Workshop and Conference (CCWC). IEEE, 2022.
- 3. *Mustafa Al-Fayoumi*, Ammar Odeh, Ismail Keshta, Abobaker Aboshgifa, Tareq AlHajahjeh, Rana Abdulraheem, "Email phishing detection based on naïve Bayes, Random Forests, and SVM classifications: A comparative

study." 2022 IEEE 12th Annual Computing and Communication Workshop and Conference (CCWC). IEEE, 2022.

- 4. Hani M Almimi, Samar A Shahin, Mohammad Sh Daoud, Mustafa Al Fayoumi, Yazeed Ghadi, "Enhanced E-Voting Protocol Based on Public Key Cryptography", 2019 International Arab Conference on Information Technology (ACIT), 3-5 December 2019, Al Ain University, UAE.
- Ahmed Hambouz, Yousef Shaheen, Abdelrahman Manna, Mustafa Al-Fayoumi, Sara Tedmori, "Achieving Data Integrity and Confidentiality Using Image Steganography and Hashing Techniques", 2019 2nd International Conference on new Trends in Computing Sciences (ICTCS), 09-11 October, 2019, Amman Jordan
- 6. Ashraf Karaymeh, Mohammad Ababneh, Malik Qasaimeh, *Mustafa Al-Fayoumi*, "Enhancing Data Protection Provided by VPN Connections over Open WiFi Networks", 2019 2nd International Conference on new Trends in Computing Sciences (ICTCS), 09-11 October, 2019, Amman Jordan.
- Saif Kazakzeh, Eyad Ayoubi, Baraa K Muslmani, Malik Qasaimeh, *Mustafa Al-Fayoumi*, "Framework for Blockchain Deployment: The Case of Educational Systems", 2019 2nd International Conference on new Trends in Computing Sciences (ICTCS), 09-11 October, 2019, Amman Jordan.
- 8. Ruba haj Hamad and *Mustafa Al-Fayoumi*, "Scalable Quality and Testing Lab (SQTL): Mission-Critical Applications Testing, 2019 International Conference on Computer and Information Sciences (ICCIS), Saudi Arabia, 3-4 April 2019.
- **9.** Ruba haj Hamad and *Mustafa Al-Fayoumi*, "Modernisation of a Classical Data Centre (CDC) vs Adoption in Cloud Computing: Total Cost of Ownership Case Study", accepted in the International Arab Conference on Information Technology (ACIT'2018), Lebanon, November 28-30, 2018.
- 10. Ruba haj Hamad and Mustafa Al-Fayoumi," SATP: Scalable Agile Transforming Process to transform Waterfall PMO into Agile PMO: Jordanian Case Study and Best Practices", accepted in International Arab Conference on Information Technology (ACIT'2018), Lebanon, November 28-30, 2018.
- 11. Sattar Aboud, Mustafa Al-Fayoumi, Mohammad Al-Fayoumi and Ja'afer Al Saraireh, "An Efficient E-Coin Scheme Under Elliptic Curve Cryptography", International Conference on New Trends in Computing Sciences (ICTCS 2017), 11-13 October, 2017, Amman Jordan.
- 12. Mohammad Daoud, Adrian Hopgood, *Mustafa Al-Fayoumi*, Hani Mimi, "A New Routing Area Displacement Prediction for Location-Based Services based on an Enhanced Ant Colony, 2014 IEEE International Conference on Systems, Man, and Cybernetics (SMC2014), 5-8 October, 2014, San Diego, CA, USA, 2014.
- Mohammad Daoud, Aladddin Ayesh, Mustafa Al-Fayoumi, Adrian Hopgood,
 "An Enhancement Ant Colony Optimization for Routing Area Mobility

Prediction over Cellular Communication Network", 5th International Conference on Agent and Artificial Intelligence (ICAART 2013), Page(s) 392-397, 15-18 February, 2013, Barcelona, Spain, 2013.

- Mohammad Daoud, Aladddin Ayesh, *Mustafa Al-Fayoumi*, Adrian Hopgood, "A New Splitting-based Displacement Prediction Approach for Location-Based Services", 2011 IEEE International Conference on Systems, Man, and Cybernetics (IEEE SMC 2011), Page(s) 392-397, October 9-12, 2011, Anchorage, AK, USA, 2011.
- 15. Mohammad Al-Fayoumi, Sattar Aboud, *Mustafa Al-Fayoumi* and Daniyal Alghazzawi, "Efficient E-Payment Protocol Using Hash Chain", European, Mediterranean & Middle Eastern Conference on Information Systems 2010 (*EMICIS2010*) April 12-13, 2010, Abu Dhabi, UAE.
- 16. Sattar Aboud, Al-Mohammad Fayoumi, *Mustafa Al-Fayoumi* and Haidar Jabbar, "An Efficient RSA Public Key Encryption Scheme", Fifth IEEE International Conference on Information Technology: New Generations (ITNG 2008), 7-9 April 2008, Las Vegas, Nevada, USA., Pages: 127 130.
- 17. Shadi Nashwan, *Mustafa Al-Fayoumi* and Sufian Yousef, "An Efficient Authentication Protocol for UMTS Mobile Network", the Student University Conference, Chelmsford, Anglia Ruskin University, 18 April, 2007.
- 18. Mustafa Al-Fayoumi, Shadi Nashwan and Sufian Yousef and Abdel-Rahman Alzoubaidi, "A New Hybrid Approach of Symmetric/Asymmetric Authentication Protocol for Future Mobile Networks", Third IEEE International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2007), pp.29, New York, USA, 2007.
- Mustafa Al-Fayoumi, Shadi Nashwan and Sufian Yousef, "Exploiting Public Key Cryptography against Third-Party Attacks in GSM, GPRS, UMTS and 4G Wireless", 2005 Fourth Generation Mobile Forum Conference (4GMF'2005) in San Diego, California, July 7-8, 2005.

D. Editor/Reviewer/ Examiner

- 1. Member of the organization committee, 2nd International Conference on new Trends in Computing Sciences (ICTCS), 09-11 October, 2019, Amman Jordan.
- 2. Member of the technical Committee, 2019 International Conference on Computer and Information Sciences (ICCIS), Saudi Arabia, 3-4 April 2019.
- **3.** Reviewer, International Conference on New Trends in Computing Sciences (ICTCS 2017), 11-13 October, 2017, Amman Jordan
- 4. Reviewer, EURASIP Journal on Wireless Communications and Networking (Springer), ISSN: 1687-1499 (Online).
- 5. Reviewer, Students Conference, Saudi Arabia.
- 6. Reviewer, The International Arab Journal of Information Technology (IAJIT).

E. Quality & Accreditation Experience (Highlights)

- I chaired a workshop on Course Profile, Faculty of Educational Sciences & Arts (FESA) UNRWA, Amman, April, 2018.
- I chaired a workshop on How to Qualify for ABET Accreditation, Khartoum/ Sudan, (2 days), Sept, 2017.
- Served for 5 Years in the college of computer engineering and sciences (CCES) at Prince Sattam Bin Abdulaziz University (PSAU), as a member in the steering committee to ABET (Accreditation board of Engineering and Technology).
- Served for 5 Years in the computer science department, as a director of developmental review project for computer science program to national accreditation-NCAAA (NCAAA is National Commission for Academic Accreditation & Assessment).
- Designed and implemented NCAAA and ABET readiness program for the college of computer engineering and sciences-CCES (Computer Science, Computer Engineering and Information Systems)
- Strong experience in outcome-based assessment, curriculum development and course/program specification to comply with accreditation standards.
- 3+ Years' experience leading strategic implementation of ABET and NCAAA compliance at CCES/PSAU. Trained college-wide faculty and staff on ABET and NCAAA protocols. Developed strategic plans to comply with ABET and NCAAA and is leading the process to Quality and Accreditation at CCES/PSAU.
- Preparing the Self-Study Report (SSR) for computer science program and then submitting to NCAAA for reviewing.
- I chaired training sessions on ABET criteria in the CCES-PSAU.
- I chaired training sessions on NCAAA criteria in the CCES-PSAU.
- Consultant for Quality and Accreditation at the College of Computer and Information Security/ Naïf Arab University for Security Sciences, 2015/2016.

F. Workshops Papers Postgraduate Training Scheme

F.1 Postgraduate Training Scheme

- 1. Stage I Part A: Pre-Induction, Anglia Ruskin University, Chelmsford UK, October 2005.
- 2. Stage I Part B: Induction, Anglia Ruskin University, Chelmsford UK, October 2005.

- **3.** Stage II Part A: Presentations, Anglia Ruskin University, Chelmsford -UK, April 2006.
- 4. Stage II Part A: Academic Writing, Anglia Ruskin University, Chelmsford UK, April 2007.
- 5. Stage III Final Phase preparing yourself for Oral Viva, Anglia Ruskin University, Cambridge UK, May 2008.

F.2 Quality Workshops

- Workshop on Characterization of Program and Courses of Study, Deanship of Development and Quality, Prince Sattam bin Abdulaziz University- KSA, 19-20, December 2010.
- Workshop on Description of Program and Courses of Study, Deanship of Development and Quality, Prince Sattam bin Abdulaziz University- KSA, 19-20, December 2010.
- 3. Workshop on Analysis of Internal and External environment of the Prince Sattam bin Abdulaziz University from the point of view of faculty members, Strategic Plan Project, Prince Sattam bin Abdulaziz University- KSA, January 2011.
- **4.** 1st Workshop (ABET) on Academic Accreditation Program (ABET), Prince Sattam bin Abdulaziz University.
- 5. 2nd Workshop (ABET) on Establishing Program Vision and Mission and development of Program Educational Objectives (PEOs), Prince Sattam bin Abdulaziz University.
- **6.** 3rd Workshop (ABET), on Course Description, Prince Sattam bin Abdulaziz University.
- **7.** 4th Workshop (ABET) on Course Profile, Prince Sattam bin Abdulaziz University.
- 8. 5th Workshop (ABET) on Course Mapping to student outcomes, Prince Sattam bin Abdulaziz University.
- **9.** 6th Workshop (ABET) on Students Assessment, Prince Sattam bin Abdulaziz University.
- **10.** 7th Workshop (ABET) on Capstone Assessment, Prince Sattam bin Abdulaziz University.
- 11. Workshop on Review and Improvement of Program Specification and Report, Deanship of Development and Quality, Prince Sattam bin Abdulaziz University- KSA, 16-17, September 2012.
- 12. Workshop on Transforming from a traditional to a blended learning, Deanship of IT and Distance Learning, Prince Sattam bin Abdulaziz University- KSA, 21, May 2015.
- 13. Workshop on Learning Management using Blackboard 9.1, Deanship of IT and Distance Learning, Prince Sattam bin Abdulaziz University- KSA, 9, September 2015.

14. Workshop on Assessment of Learning Outcomes, Britch Council & NCAAA, Prince Sattam bin Abdulaziz University- KSA, 14-15, October 2015.

G. Academic Activities & Services

G.1 University Committees

- Member of the top committee for reviewing the guide of academic quality Assurance Procedures, Princess Sumaya University for Technology, Jordan, 2017-present.
- Member of Steering Committee of Academic Accreditation Program (ABET), the Prince Sattam bin Abdulaziz University, 2010-2016.
- Representative of the faculty of science and IT at the University board for graduation ceremony, the Al-Zaytoonah University, 2009-2010.

G.2 College Committees

- Vice Dean, King Hussein School for Computing Sciences, Princess Sumaya University for Technology, Jordan, 2017-present.
- Chairman of Strategic Plan Committee, King Hussein School for Computing Sciences, Princess Sumaya University for Technology, Jordan, 2019-present.
- Member of the FORC Erusmus + project to design two course in digital forensics. PSUT and four other universities, 2019.
- Founder of the Bachelor's Program in Data Science and Artificial Intelligence, PSUT, Jordan, 2019.
- Founder of the Bachelor's Program in Cybersecurity, PSUT, Jordan, 2020.
- Member and coordinator for the study plan for the Master of Information Security and Digital Criminology program, PSUT, Jordan, 2018-present.
- Charmin of academic schedule (Teaching load) committee at the King Hussein school of computing sciences/PSUT, 2017- present.
- Member, College Council, King Hussein School for Computing Sciences, Princess Sumaya University for Technology, Jordan, 2017-present
- Chairman of Quality Assurance Committee, Princess Sumaya University for Technology 2018-present.
- Chairman of disciplinary committee for students, King Hussein School for Computing Sciences, Princess Sumaya University for Technology, 2017-present.
- Chairman of committee for selecting the best teacher and researchers, King Hussein School for Computing Sciences, Princess Sumaya University for Technology, 21017-present.
- Member of Quality Assurance Committee, Princess Sumaya University for Technology 2017-2018.
- Dean's Assistant for Development and Quality, College of Computer Engineering and Sciences, the Prince Sattam bin Abdulaziz University, 2015-2016.

- Member, External Advisory Board, College of Computer Engineering and Sciences, the Prince Sattam bin Abdulaziz University, 2015-2016.
- Member, College Council, College of Computer Engineering and Sciences, the Prince Sattam bin Abdulaziz University, 2012- 2016.
- Deputy Dean, Developmental Review Project for Computer Science Program (NCAAA), the Prince Sattam bin Abdulaziz University, 2012-2016.
- Member, Bridging Plan of Study College of Computer Engineering and Sciences, the Prince Sattam bin Abdulaziz University, 2012.
- Member, Supreme Committee of the curriculum College of Computer Engineering and Sciences, the Prince Sattam bin Abdulaziz University, 2011-2016.
- Member, College Appointment and Promotion committee, the Prince Sattam bin Abdulaziz University, 2011- 2016.
- Member, College Committee of Academic Accreditation Program (ABET), the Prince Sattam bin Abdulaziz University, 2010-2016.
- Member, Quality Assurance Committee of College, the Prince Sattam bin Abdulaziz University, 2010- 2016.
- Chairman, Development and study committee of new department (Computer Networks), the Al-Zaytoonah University-Faculty of Science and IT, 2009-2010.
- Member, Transfer of credit, Registration and Training committee, the Al-Zaytoonah University-CIS Department - Quality Assurance and Accreditation, 2009-2010.
- Member, Technical committee in the 4th International Conference on Information Technology (ICIT-2009), the Al-Zaytoonah University.

G.3 Department Committees

- Chairman of development curriculum committee, King Hussein School for Computing Sciences, Princess Sumaya University for Technology, 2017-present.
- Chairman, Department curriculum committee, the Prince Sattam bin Abdulaziz University, 2011- Present.
- Chairman, Department curriculum committee, the Prince Sattam bin Abdulaziz University, 2011- 2015.
- Projects Coordinator of computer Science department, the Prince Sattam bin Abdulaziz University, 2010- 2011.
- Secretary of the Board of computer Science department, Prince Sattam bin Abdulaziz University, 2010-2011.
- Representative of the Computer Science for Quality Assurance and Accreditation, the Prince Sattam bin Abdulaziz University, 2010- 2011.
- Secretary of the Board of computer information systems department, the Al-Zaytoonah University, 2009-2010

- Chairman, Study schedules committee, the Al-Zaytoonah University- CIS Department, 2004-2005, 2009-2010.
- Member, Study plans development committee, the Al-Zaytoonah University-CIS Department, 2004-2005. 2009-2010.
- Chairman, Transfer of credit committee, the Al-Zaytoonah University- CIS Department, 2004-2005, 2009-2010.