

CURRICULUM VITAE

Professor

Full name: Prof. Mohammad Ahmad Alia.

Department/Faculty: Cybersecurity / Faculty of Sciences and IT

University, City, Jordan: Al Zaytoonah University, Amman, Jordan

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1. Personal Data

26th November, 1977

Nationality: Jordanian.

2. Education

- Ph.D. (Computer Science - Information Security/Cryptography)
2008, University Sains Malaysia (USM), Penang, Malaysia,
- M.Sc. (Information Technology, (“A”) 2003,
- B.Sc. Computer Science, (83.8%), Al Zaytoonah University of Jordan.
1999-2000, Amman, Jordan

3. Professional certificates

- CEH → Certified Ethical Hacker
- CSA-SOC → Security Operations Center
- Preparing and teaching CISA -ISACA

4. Ph.D. Dissertation

Thesis title: *'A New Approach to Public-Key Cryptosystem Based on Mandelbrot and Julia Fractal Set'*.

Research Synopsis: This study shows the possibility of establishing Fractal based cryptosystem algorithm including key exchange protocol, public key encryption algorithm and digital signature scheme, derived from the logical connection between the Mandelbrot and Julia Fractal sets. The security protection of the proposed Fractal cryptosystem depends on the number of iterations and the added variation constants during the iteration of Mandelbrot and Julia functions. This makes Mandelbrot and Julia values jump path chaotically and also it will establish the needed complexity of the proposed schemes. However, we can identify that the proposed Fractal public-key cryptosystem is based on chaotic hard problem. The chaotic nature of the Fractal functions ensures the security of the proposed public-key cryptosystem schemes, and this will prevent a brute force attack.

5. Employment

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| <i>Oct 2023-now</i> | : Professor – Cybersecurity Dept. Faculty of Sciences and IT Al Zaytoonah University |
| <i>2025 –3rd .Sem.</i> | : Part Time -, C.S. Dep., University of Jordan. “ <i>Management security and auditing (CISA-ISACA)</i> ” |
| <i>3rd Oct 2019-Oct 2023</i> | : Dean of Scientific Research & Innovation |
| <i>5th Oct 2016- 30th Sep.- 2019</i> | : Faculty Deputy Dean Faculty of Sciences and IT Al Zaytoonah University |
| <i>Oct. 2009 - 2019</i> | : Head of Computer Information Systems Dept. Faculty of Sciences and IT Al Zaytoonah University |
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| <i>28th May 2018</i> | : Professor- CIS & Cybersecurity Departments |
| <i>28th May 2013- 2018</i> | : Associate Professor – Computer Information Systems Dept. Faculty of Sciences and IT Al Zaytoonah University |

- May 2008 – 27th May 2013** : **Assistant Professor** - Computer Information Systems Dept. Faculty of Sciences and IT Al Zaytoonah University
- 2008 / 2009 –1st.Sem.** : Lecturer- Part Time -, Information Technology Dep., Petra University.
- 2008 / 2009 –2^{ed} .Sem.** : Lecturer- Part Time -, C.S. Dep., University of Jordan.
- 2006 - 2008** : Research Officer, School of Computer Science, University Sians of Malaysia (USM). I worked as a part of Professor Azman Samsudin research group under two projects :
1. “*Cryptography Primitives Based on Chaos Logistic Map*”.
 2. “*Parallelisation Stream Cipher Cryptosystem Based on NP-Hard Problem (PSCC)*”.
- Feb. 2005- Feb. 2006** : Lecturer, Computer Science in the PTTI College – KSA.
- June 2003- Sep 2004** : Lecturer, Computer Science department - Al Zaytoonah University of Jordan.
- Oct 2000– June 2003** : Lab Operator, Computer Science department - Al Zaytoonah University of Jordan

Academic Positions

- Professor, CIS & Cybersecurity, Faculty of Sciences and IT, Al Zaytoonah University
May 28, 2018
- Associate Professor “A”, Computer Information Systems Dept., Faculty of Sciences and IT, Al Zaytoonah University
January 15, 2018
- Associate Professor “B”, Computer Information Systems Dept., Faculty of Sciences and IT, Al Zaytoonah University
May 28, 2018
- Assistant Professor, Computer Information Systems Dept., Faculty of Sciences and IT, Al Zaytoonah University
May 27, 2008

Administrative Positions

- Dean of Scientific Research, Al Zaytoonah University, Jordan, 3rd Oct. 2019- Oct. 2023

- Faculty Deputy Dean, Faculty of Sciences and IT, Al Zaytoonah University, Jordan, 5th Oct. 2016- 30th Sep. 2019.
- Head of Computer Information Systems Department, Faculty of Sciences and IT, Al Zaytoonah University, Jordan, Oct. 2009 – 30th Sep. 2019.

6. **Research Interests**

Information Security, Cryptography, Network Security, Cryptocurrency, and System Analysis and Design.

7. **Fellowships and Scholarships**

- *“Cryptography Primitives Based on Chaos Logistic Map”*.
- *“Parallelisation Stream Cipher Cryptosystem Based on NP-Hard Problem (PSCC)”*.

8. **Teaching Experience**

- ***Graduate Courses***

- Information Security
- Cryptography

- ***Undergraduate Courses***

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|---------------------------------------|--|
| ○ Security auditing | ○ Emerging topics in IT |
| ○ Data & Inf. Security | ○ Cryptography |
| ○ Information security - Cryptography | ○ Network Security |
| ○ Information Technology | ○ System Analysis and Design |
| ○ Networks | ○ Information Systems |
| ○ Management Information System (MIS) | ○ Pascal Programming |
| ○ Artificial Intelligence | ○ File organization |
| ○ Visual Basic 6.0. | ○ C++ |
| ○ Data Base design | ○ Computer Skills (Win XP and Office XP) |
| | ○ Java |
| | ○ Html and Java script |
| | ○ VB.net and ASP.net |

- Logic Design
- Discrete Structure
- Multimedia

9. Supervision of Graduate Research

| Thesis Title (Master) | Student Name | Year |
|--|----------------------|---------|
| An Improved Approach for secured Mobile Payment System Based on Public-Key Cryptography | Ehap Al Khateeb | 2015 |
| An improved Video Stenographic System Based on Exact Matching Algorithm And Random Key -Dependent Data Technique | Maher Al Sarayrah | 2017 |
| Increasing The Awareness About Cyber-Crime and Hate Speech in Social Media | Alaa Fahed Al-Abbadi | 2019 |
| An improved fully convolutional neural network (FCNN)-based digital image watermarking by using DWT, DCT and practical swarm optimization algorithms | Aseel Al Rawashdeh | 2023 |
| Enhancing Cybersecurity through AI-Driven Threat Detection and Mitigation Systems in Endpoint Environments | Ashraf Ebzakh | Present |

9. Grants

- Advancing a Green Environment: A Chemistry Driven Approach to Sustainable Development
- Analysis of Performance and Security Challenges of SiS/SaaS Applications on the Cloud: A Case Study of Al-Zaytoonah University of Jordan — JD 82,000 (2023–2024)
- Enhancing Calibration Techniques in Quantum Computers Using Graph Theory — JD 11,500 (2023–2024)
- Research Project : Al-Zaytoonah University of Jordan Journal Management System, Al Zaytoonah University of Jordan, 7300JD , 2021-2022
- Research Project: Implementation of a Regulatory Framework Model for Electric Vehicle Charging Operations, Al Zaytoonah University of Jordan, 10550 JD, 2020-2021
- Research Project: Scientific Research Management System for Al-Zaytoonah University of Jordan, Al Zaytoonah University of Jordan, 8000 JD, 2019-2020
- Research Project: "A Novel Approach to Extract Illegal and Terrorist Contents from Arabic Social Media Posts Using Machine Learning Technique", Al Zaytoonah University of Jordan, 15000 Jordan Dinar, 2018-2019
- Research Project: "A Novel Method for Localising a Randomly

- Distributed Wireless Sensor Network”, Al Zaytoonah University of Jordan, 24,530 Jordan Dinar, 2017-2015
- Research Project :“Integrated System For Monitoring And Recognizing Students During Class Session”, Al Zaytoonah University of Jordan, 35000 Jordan Dinar 2012-2015

10. Radio and Television Interviews

- **Radio Interviews:**

#Amman_FM

#GoodMorning

Thursday, 23/1/2025

Prepared and presented by: Samah Talal’ah

A phone interview with Professor Dr. Mohammad Alia

A phone interview to discuss:

“Keeping up with developments and updates in the cybersecurity sector and promoting conscious digital usage.”

<https://www.facebook.com/watch/?mibextid=wwXlfr&v=1147125080393034&rdid=BeeTu1CUfoS6owe1>

- **Television Interviews**

Al-Mamlaka TV Channel

"Sawt Al-Mamlaka" | What is Cybersecurity?

Interview with Professor Dr. Mohammad Alia

<https://www.youtube.com/watch?v=2FMJW4KoZUU>

11. Membership of Committees

| No. | Dates | Description |
|------------|--------------|---|
| 1. | 2025 | <i>Chair, the University Disciplinary Council</i> |
| 2. | 2024-present | <i>Member, the University Investigation Committees</i> |
| 3. | 20.23-now | <i>Member , the University Disciplinary Council</i> |
| 4. | 2021-now | <i>The Higher Committee for the Ali Al-Qirem Award for Excellence and Innovation</i> |
| 5. | 2023-2020 | <i>Chair of the Periodicals Subscription Committee at Al-Zaytoonah University Library</i> |
| 6. | 2023-2019 | <i>Chair , GreenMetric Ranking Committee at the University</i> |
| 7. | -2019-now | <i>Member, the University Ranking Committees</i> |

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| 8. | 2023-2021 | <i>Member, Design and Manufacturing Center Committee, Al-Zaytoonah University</i> |
| 9. | 2022-2023 | <i>Conference Steering committee member: The 11th International Conference on Information Technology - ICIT'2023 – Al Zaytoonah University – Jordan.</i> |
| 10. | 2022 | <i>Conference Steering committee member: The 2022 IEEE Middle East & North Africa COMMUNICATIONS Conference (MENACOMM 2022)</i> |
| 11. | 2021 | <i>Conference program Chair: The 10th International Conference on Information Technology - ICIT'2021 – Al Zaytoonah University – Jordan.</i> |
| 12. | 2019 oct-2023 | <i>University COUNCIL, Al Zaytoonah University – Jordan.</i> |
| 13. | 2020-2021 | <i>Thesis Examiner (14 thesis)</i> |
| 14. | 2019 oct | <i>DEANS COUNCIL, Al Zaytoonah University – Jordan.</i> |
| 15. | 2019 | <i>Conference Chair: The 9th International Conference on Information Technology - ICIT'2019 – Al Zaytoonah University – Jordan.</i> |
| 16. | 2017-Present | <i>International Journal of Network Security and its Applications</i> |
| 17. | 2017-Present | <i>World Academy of Science, Engineering and Technology</i> |
| 18. | 2015-2023 | <i>Deanship of Scientific Research Council</i> |
| 19. | 2015, 2018- | <i>Member , the University Disciplinary Council</i> |
| 20. | 2017 | <i>Technical and Organizing Committe: The 8th International Conference on Information Technology - ICIT'2017 – Al Zaytoonah University – Jordan.</i> |
| 21. | 2017 | <i>Thesis Examiner: Saied Al Saydeh, “Detecting Phishing Emails Using Data Mining Classification Techniques”, Middle East University.</i> |
| 22. | 2017 | <i>Thesis Examiner: Mayyadah Adnan Abdulridha, “Online Security Protocols for NFC Mobile Payment Application”, Pricess Sumaya University for Technology.</i> |

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| 23. | 2016 | <i>Thesis Examiner: Dayala Rasheed, " A Secure Visual Cryptography System For Identification cards ", A Zaytoonah Universit of Jordan.</i> |
| 24. | 2016 | <i>Thesis Examiner: Arwa Husien Abu al-Rukab, " A Robust Method for Copy-Move Forgery Detection ", Zarqa University.</i> |
| 25. | 2016 | <i>Thesis Examiner: Omar Mijbel Hammad, Master Degree, Voice Encryption Using Twin Stream Cipher Algorithm", Middle East University, 2016.</i> |
| 26. | 2015 | <i>Thesis Examiner: Raghda Ahmad Malih, Master Degree, "User Authntication System Using Emoji Pictures Passwords", Middle East University.</i> |
| 27. | 2015 | <i>Organizing Committe: The 7th International Conference on Information Technology - ICIT'2015 – Al Zaytoonah University – Jordan, May 2015.</i> |
| 28. | 2013 | <i>Steering Committe: The 6th International Conference on Information Technology - ICIT'2013 – Al Zaytoonah University – Jordan, May 2013.</i> |
| 29. | 2011 | <i>Technical Committee: The 5th International Conference on Information Technology - ICIT'2011 – Al Zaytoonah University – Jordan.</i> |
| 30. | 2011 | <i>Thesis Examiner: Haneen Mohammed Fayoumi, Master Degree, "Secure Authentication Prortocol and Key Agreement for Mobile Nettworks Using Public–Key Cryptography", Middle East University.</i> |
| 31. | 2011 | <i>Thesis Examiner: Reem Ali Al-Saidi, Master Degree, "A Secure Electronic Voting Scheme Based on Evox-MA and REVS Protocols", Middle East University</i> |
| 32. | 2009 | <i>Technical Committee: The 4th International Conference on Information Technology - ICIT'09 – Al Zaytoonah University – Jordan.</i> |

12. Participation in or organization of curricular and/or extra-curricular activities

| No. | Curricular | Year |
|-----|---|-----------------------|
| 1. | Artificial Intelligent Engineering, Al Zaytoonah University, Jordan | 2018,2019 |
| 2. | Computer Information Systems, Al Zaytoonah University, Jordan | 2019,2017, 2016, 2014 |
| 3. | Computer Science, Al Zaytoonah University, Jordan | 2017,2019 |
| 4. | Multimedia, Al Zaytoonah University, Jordan | 2017 |
| 5. | Computer Network, Al Zaytoonah University, Jordan | 2017 |

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| 6. | Software Engineering, Al Zaytoonah University, Jordan | 2017,2019 |
| 7. | Mathematics, Al Zaytoonah University, Jordan | 2017,2019 |
| No | Certificate | |
| 1. | Test Construction and Analysis of Results | 2017 |
| 2. | Arab Council for Training Student of Arabic Universities | 2018 |
| 3. | Attaining the Quality Assurance Certificate –ZUJ University (5 Stars Certificate) | 2018 |

13. Publications

1. **Mohammad Alia** and Azman Bin Samsudin. New Key-Exchange Protocol Based on Mandelbrot and Julia Fractal Sets. International Journal of Computer Science and Network Security, IJCSNS, vol. 7, no.2, pp. 302-307, 2007.
2. **Mohammad Alia** and Azman Bin Samsudin. A New Public-Key Cryptosystem Based on Mandelbrot and Julia Fractal Sets. Asian Journal of Information Technology, AJIT, vol. 6, no. 5, pp. 567-575, 2007.
3. **Mohammad Alia** and Azman Bin Samsudin. A New Digital Signature Scheme Based on Mandelbrot and Julia Fractal Sets. American Journal of Applied Sciences, AJAS, vol. 4, no. 11, pp. 850-858, 2007.
4. **Mohammad Alia** and Azman Bin Samsudin. Generalized Scheme For Fractal Based Digital Signature (GFDS). International Journal of Computer Science and Network Security, IJCSNS, vol. 7, no.7, pp.99-104, 2007.
5. **Mohammad Alia** and Azman Bin Samsudin. Fractal Public-Key Encryption Protocol. Computer Science Postgraduate Colloquium 2007 (CSPC'07), Universiti Sains Malaysia, 2007.
6. Mahmoud Maqableh, Azman Bin Samsudin and **Mohammad Alia**. New Hash Function Based on Chaos Theory (CHA-1). International Journal of Computer Science and Network Security, IJCSNS, vol. 8, no.2, pp.20-26, 2008.
7. **Mohammad Alia** and Azman Bin Samsudin. Survey on Fractal (Mandelbrot and Julia Sets) Public-Key Cryptosystem. National Conference on Information Retrieval and Knowledge Management (CAMP08), March 2008.
8. **Mohammad Alia** and A. Samsudin. Fractal (Mandelbrot and Julia) Zero-Knowledge Proof of Identity. Journal of Computer Science (JCS), 4(5), pp. 408-414, 2008.
9. Sundaram Sudha, Azman Samsudin and **Mohammad Ahmad Alia**. Group Re-keying Protocol Based on Modular Polynomial Arithmetic Over Galois Field $GF(2^n)$. American Journal of Applied Sciences (AJAS), 6 (9): 1714-1717, 2009.
10. **Mohammed Ahmed Alia** and Abdelfattah A. Yahya. Public-Key Steganography Based on Matching Method. European Journal of Scientific Research, ISSN 1450-216X Vol.40 No.2 (2010), pp.223-231, 2010.
11. **Mohammed Ahmed Alia**. Survey on Mathematical Hard Problems Based Public-Key Cryptosystems. World Academy of Science, Engineering and Technology, 68. 2010.
12. **Mohammad A. Alia**, Adnan A. Hnaif, Hayam K. Al-Anie, Khulood Abu Maria, Ahmed M. Manasrah, M. Imran Sarwar, A Novel Header Matching Algorithm for

- Intrusion Detection Systems, International Journal of Network Security & Its Applications (IJNSA), Vol.3, No. 4. pp. 59-73. 2011.
13. Hayam K. Al-Anie, **Mohammad A. Alia** and Adnan A. Hnaif. E-Voting Protocol Based On Public-Key Cryptography. International Journal of Computer Science and Information Technology (IJCSIT). Vol.3.No. 4. pp. 87-98. 2011.
 14. Mohammad A. Alia. Comparison Study On NP-Hard Problem Based Digital Signature Schemes. International Science And Technology Conference – ISTECS 2011. Istanbul University-Turkey. December 7-9. pp. 149-154. 2011.
 15. Mohammad A. Alia, Adnan A. Hnaif, Hayam K. Al-Anie, Abdelfatah Aref Tamimi. Graphical Password Based On Standard Shapes. Science Series Data Report Journal. Volume 4, Issue 2. pp. 71-79. 2012.
 16. Abdallah A. Hlayel and **Mohammad A. Alia**. Solving transportation problems-using the best candidates method. Computer Science & Engineering: An International Journal (CSEIJ).Vol.2, No.5. pp. 23-30. 2012.
 17. Omaira N. A., Abdelfatah Aref Tamimi, and **Mohammad A. Alia**. Face Recognition System Based on Different Artificial Neural Networks Models and Training Algorithms. IJACSA, Vol. 4, No. 6, 2013.
 18. **Mohammad A. Alia**. Cryptosystems Based on Chaos Theory. The 2nd International Symposium on Chaos, Complexity and Leadership-ICCLS2013. 17th – 19th Dec. 2013. Middle East University. Ankara. Turkey. Book Chapter, Springer
 19. **Mohammad A. Alia**, Abdelfatah Aref Tamimi and Omaira N. A. AL-Allaf. Integrated System For Monitoring And Recognizing Students During Class Session. IJMA, Vol. 5, No. 6, 2013.
 20. **Mohammad A. Alia**, Abdelfatah Aref Tamimi, and Omaira N. A. AL-Allaf. Cryptography Based Authentication Methods. Proceedings of the World Congress on Engineering and Computer Science 2014 Vol I, WCECS 2014, 22-24 October, 2014, San Francisco, USA.
 21. Omaira N. A., Abdelfatah Aref Tamimi, and **Mohammad A. Alia**. Eigen Faces and Principle Component Analysis for Face Recognition Systems: A Comparative Study. INTERNATIONAL JOURNAL OF COMPUTERS & TECHNOLOGY. Vol 14 . No. 4, Feb. 2015
 22. Omaira N. A., Abdelfatah Aref Tamimi, and **Mohammad A. Alia**. Real-Time Group Face-Detection for an Intelligent Class-Attendance System. I.J. Information Technology and Computer Science, 06, 66-73. 2015.
 23. Adnan A. Hnaif and **Mohammad A. Alia**. MOBILE PAYMENTMETHODBASED ON PUBLIC-KEY CRYPTOGRAPHY. International Journal of Computer Networks & Communications (IJCNC) Vol.7, No.2, March 2015.
 24. Ehab M. Alkhateeb, **Mohammad A. Alia**, and Adnan A. Hnaif. An Improved Approach for Secured Mobile Payment System based on Ecies Cryptography. International Journal of Research in Computer Applications & Information Technology. Volume 3, Issue 3, May-June 2015, pp. 28-39, 2015.
 25. Ehab M. Alkhateeb, **Mohammad A. Alia**, and Adnan A. Hnaif. The Generalised Secured Mobile Payment System Based on ECIES and ECDSA. ICIT 2015 - The 7th International Conference on Information Technology. May 2015. Amman, Jordan.
 26. **Mohammad A. Alia** and Adnan A. Hnaif, The Parallelized Header Matching Algorithm for Intrusion Detection Systems. The 3rd International Conference on Islamic Applications in Computer Science And Technology, 1-3 Oct 2015, Konya-Turkey.
 27. Maher A. Alsarayreh, **Mohammad A. Alia**, Khulood Abu Maria , A Novel Image Steganographic System Based on Exact Matching Algorithm and Key-Dependent Data Technique, JATIT journal, Vol.95. No 5.p.p 1212-1224

28. **Mohammad A. Alia**, Combining Public-Key Encryption with Digital Signature Scheme. Chapter in *Advances in Intelligent Systems and Computing*, Springer , 2016.
29. Heba N. Kamel, Mohammad A. Alia, Bara'aha. Al Saeq and Eman Abu Maria, A Secure E-Medical Exemption System (E-MES): Jordan Case. *International Journal of Network Security & Its Applications (IJNSA)* Vol.9, No.2, March 2017.
30. Ahmad AA Al Khatib, **Mohammad A. Alia**, Adnan Hnaif . “Smart System for Forest Fire Using Sensor Network. *International Journal of Security and Its Applications*. Vol. 11, No. 7 (2017), pp.1-16
31. **Mohammad A. Alia** and Khaled Suwais, “A Novel Steganography Scheme based on Fractal Set. *The International Arab Journal of Information Technology-Thomson Reuters (IF: 0.724)* (2019)
32. **Mohammad A. Alia**, Adnan Hnaif . Ayman Abdullah, and Eman Abu Maria, “An Improved Authentication Scheme Based on Graphical Passwords ICIC Express Letters: *Journal of Innovative Computing, Information and Control* Vol. 12. No 11, 2018
33. Ahmad AA Al Khatib, **Mohammad A. Alia**, Adnan Hnaif . “A Novel Method For Localising A Randomly Distributed Wireless Sensor Network International Journal of System Assurance Engineering and Management, Springer, First Online: 20 Dec 2017
34. Adnan A. Hnaif, Ali Aldahoud, **Mohammad A. Alia**, Issa S. Al’otoum and Duaa Nazzal, “Multiprocessing scalable string matching algorithm for network intrusion detection system”, *Int. J. High Performance Systems Architecture*(2018)
35. **Mohammad A. Alia**, Khulood Abu Maria, Maher A. Alsarayreh Eman Abu Maria and Sally Almanasra,”An Improved Video Steganography: Using Random Key-Dependent”, 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT), 2019-Amman-Jordan.
36. Mohammad Shehab, Ahamad Tajudin Khader, **Mohammad A. Alia**, “Enhancing Cuckoo Search Algorithm by using Reinforcement Learning for Constrained Engineering Optimization Problems”. 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT), 2019-Amman-Jordan.
37. Tarek Kanan ; Odai Sadaqa ; Amal Aldajeh ; Hanadi Alshwabka ; Wassan AL-dolime ; Shadi AlZu’bi ; **Mohammad A. Alia**.”A Review of Natural Language Processing and Machine Learning Tools Used to Analyze Arabic Social Media”. 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT), 2019-Amman-Jordan.
38. Eman Abu Maria, Khulood Abu Maria and **Mohammad A. Alia**,” Smart Agents in the Business Information System”, *ICIC Express Letters: Journal of Innovative Computing, Information and Control* , 2019
39. KA Maria, **Mohammad A. Alia**, MA Alsarayreh, EA Maria, “ UN-Substituted Video Steganography”, *KSII Transactions on Internet & Information Systems* 14 (1), 2020
40. M Baroudi **Mohammad A. Alia**, AW Marashdih, Evaluation of Accessibility and Usability of Higher Education Institutions’ Websites of Jordan 2020 11th International Conference on Information and Communication Systems , IEEE, 2020.
41. Y Jaradat, M Masoud, S Al-Jazzar, **Mohammad A. Alia**, “Optimal network dimensions for energy conservation in clustered 3D WSN”,*Wireless Networks*, 1-13, 2021
42. A Hnaif, K Jaber, **Mohammad A. Alia**, M Daghbosheh, “Parallel Scalable Approximate Matching Algorithm for Network Intrusion Detection Systems”, *INTERNATIONAL ARAB JOURNAL OF INFORMATION TECHNOLOGY* 18 (1), 77-84, 2021
43. M Maqableh, **Mohammad A. Alia**, “ Evaluation online learning of undergraduate students under lockdown amidst COVID-19 Pandemic: The online learning experience and students’ satisfaction”, *Elsevier- Children and Youth Services Review* 128, 106160 19 2021

44. Z Marashdeh, **Mohammad A. Alia**, K Suwais, “A Survey on SQL Injection Attack: Detection and Challenges”, 2021 International Conference on Information Technology (ICIT), 957-962 2021.
45. MZ Masoud, Y Jaradat, A Manasrah, I Jannoud, **M Alia**, “ May I Know your IBAN? Cracking the Short Message Service (SMS) as a Second Factor Authentication for Online Payments”, 2021 International Conference on Information Technology (ICIT), 758-762 2021.
46. WS Aldolimi, AA Hnaif, **Mohammad A. Alia**, “ Light Fidelity to Transfer Secure Data Using Advanced Encryption Standard Algorithm”, 2021 International Conference on Information Technology (ICIT), 963-967 2021.
47. NA Al-Madi, KA Maria, MA Al-Madi, **Mohammad A. Alia**, EA Maria, “ An Intelligent Arabic Chatbot System Proposed Framework”. 2021 International Conference on Information Technology (ICIT), 592-597 2021.
48. Y Jaradat, M Masoud, I Jannoud, A Manasrah, **Mohammad A. Alia**, A Tutorial on Singular Value Decomposition with Applications on Image Compression and Dimensionality Reduction
2021 International Conference on Information Technology (ICIT), 769-772 2021.
49. Y Jaradat, M Masoud, S Al-Jazzar, **Mohammad A. Alia**, “Optimal network dimensions for energy conservation in clustered 3D WSN”, *Wireless Networks* 27 (3), 1821-1833.
50. Ismael Jannoud, Yousef Jaradat, Mohammad Z. Masoud, Ahmad Manasrah, **Mohammad A. Alia**, “The Role of Genetic Algorithm Selection Operators in Extending WSN Stability Period: A Comparative Study”, *Electronics*, Accepted 2021/Dec.
51. Y Jaradat, **M Alia**, M Masoud, A Manasrah, I Jebreil, A Garaibeh, “A bibliometric analysis of the International Journal of Advances in Soft Computing and its Applications: Research influence and Contributions.”, *International Journal of Advances in Soft Computing & Its Applications* 14 (2), 2022
52. A Manasrah, M Masoud, Y Jaradat, **M Alia**, A Zerek, “Private Tutoring During COVID in Jordan. Improving Academic Performance, or Chasing After an Illusion”, 2022 IEEE 2nd International Maghreb Meeting of the Conference on Sciences, 2022
53. M Elbes, T Kanan, **M Alia**, M Ziad, “COVID-19 Detection Platform from X-ray Images using Deep Learning”, *Int. J. Advance Soft Compu. Appl* 14 (1)
54. Y Jaradat, M Alia, M Masoud, A Manasrah, I Jebreil, A Garaibeh. “A bibliometric analysis of the International Journal of Advances in Soft Computing and its Applications: Research influence and Contributions”. *International Journal of Advances in Soft Computing & Its Applications* 14 (2).2022
55. Y Jaradat, M Masoud, I Jannoud, **M Alia**, O Alheyasat, I Jebreil, “Analysis of the optimal number of clusters and probability in homogeneous unreliable WSNs”, *Multimedia Tools and Applications*, 1-20.2023
56. Hisham A Shehadeh, Iqbal H Jebreil, Ghaith M Jaradat, Dyala Ibrahim, Rami Sihwail, Husam Al Hamad, Shu-Chuan Chu, **Mohammad A Alia**,” Intelligent Diagnostic Prediction and Classification System for Parkinson's Disease by Incorporating Sperm Swarm Optimization (SSO) and Density-Based Feature Selection Methods”. *International Journal of Advances in Soft Computing & Its Applications* 15 (1).2023
57. Tarek Kanan, Mohammed Elbes, Khulood Abu Maria, **Mohammad Alia**, “Exploring the Potential of IoT-Based Learning Environments in Education”. *International Journal of Advances in Soft Computing & Its Applications*, Vol. 15, No. 22023.
58. Mohammad Sh Daoud, Mohammad Shehab, Laith Abualigah, Mohammad Alshinwan, Mohamed Abd Elaziz, Mohd Khaled Yousef Shambour, Diego Oliva, **Mohammad A Alia**, Raed Abu Zitar, “Recent Advances of Chimp Optimization Algorithm: Variants and Applications”. *Journal of Bionic Engineering-Springer Nature Singapore*, 2023.

59. Abdul Razzak Alshehadeh, Haneen Al-khawaja, **Mohammad A Alia**, Farid Kourtel, Ehab Injadat, Iqbal H Jebril, “The Impact of Operational Characteristics on the Total Risk Management: Evidence From the Industrial Firms “. 2023 International Conference on Information Technology (ICIT), 2023.
60. Suha Afaneh, Mohammad Rasmi Al-Mousa, Hilal Shrif Al-hamid, AL-Awasa Bara'h Suliman, **Mohammad Alia**, Hani Almimi, Ahmad A Alkhatib, “Security Challenges Review in Agile and DevOps Practices”. 2023 International Conference on Information Technology (ICIT), 2023.
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