



Curriculum Vitae Form - Procedures of Faculty Transfer and Promotion

CURRICULUM VITAE Shadi Mahmoud AlZu'bi

Full Professor at Department of Computer Science

Faculty of Science and Information Technology,

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Google Scholar :

https://scholar.google.com/citations?user=7QuybU4AAAAJ&hl=ar&oi=ao

Researchgate

https://www.researchgate.net/profile/Shadi-Alzubi

AD Scientific Index:

https://www.adscientificindex.com/scientist/shadi-alzubi/449584

Scopus :

https://www.scopus.com/authid/detail.uri?authorId=57203174448

1. Personal Data

Date of Birth: 23 /05 / 1984

Nationality: Jordanian

2. Education

- Ph.D. (Electronic and Computer / Computer Science) 2011, Brunel University, West London, United Kingdom
- M.Sc. (Telecommunication Networks Management) 2008, University of Technology-Sydney, Sydney, Australia
- B.Sc. (Computer and Network Engineering) 2007, Jordan University of Science and Technology. Jordan

3. Ph.D. Dissertation

"Hybrid Multi-Resolutional Statistical Approaches for Medical Volume Segmentation", Brunel University - London, London, UK.

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4. Employment

4.1. Non-Academic Positions

4.1.1. Boss Group for Trailers Manufacturing - **Team Manager** - Ramtha, Jordan February 2005 – January 2007 [Part Time]

The company got a small group of software and office employees (rather than handy men), Responsible for the network connections and as a manager of this team.

- **4.1.2. Middle East Gate Magazine Programmer** Amman, Jordan September 2006 January 2007 [Part Time] A member in a programming team
- **4.1.3. Royal Jordanian Airlines Computer Networking Trainee** Amman, Jordan January 2007 July 2007

A trainee at the HelpDesk Team, responsible for Airline systems and the network connections between offices and branches.

4.2. Academic Positions

- 4.2.1. Jordan University of Science and Technology Lecturer Ramtha, Jordan

 June 2011 June 2015 [Part Time]
 - Part-Time Lecturer at Computer Science department.
- 4.2.2. Al Zaytoonah University of Jordan Assistant Professor Amman, Jordan
 September 2012 September 2014, / September 2016 December 2018
 Assistant Professor at computer science department
- 4.2.3. Al Zaytoonah University of Jordan Assistant Professor Amman, Jordan September 2014 September 2016

Assistant Professor at the Multimedia Systems department

4.2.4. Al Zaytoonah University of Jordan - **Associate Professor - Amman, Jordan** January 2019 – December 2022

Associate Professor at the computer science department

4.2.5. Al Zaytoonah University of Jordan - Full Professor - Amman, Jordan December 2022 - current

Associate Professor at the computer science department

4.3. Administrative Positions

- 4.3.1. Al Zaytoonah University of Jordan, Amman, Jordan
 - Computer Science Department Head Sep 2022 Sep 2023
 - Quality Assurance Officer for Academia Sep 2012 Sep 2019
 - International relations chair at ICIT ICIT 2021, ICIT 2023
 - Publicity chair at ICIT ICIT 2021, ICIT 2023





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Research Interests

Prof. AlZu'bi current research interests include the extreme learning machine for several applications such as computer vision (image processing, medical imaging, 3D volume processing, computation acceleration using parallel processing and image compression and archiving), intelligent systems (smart agriculture, autonomous driving, smart cities, and NLP).

Prof. Alzu'bi focused in the past few years on AI and its applications; he implemented several intelligent systems for solving real-time challenges, such as smart agriculture, smart transportation, smart water desalination and many more smart applications in education, health, and security. Prof. AlZu'bi has more than 110 publications in the field of AI and machine learning applications for intelligent systems.

Prof. AlZu'bi focuses as well on the intelligent use of Natural Language Processing for recent applications such as digital investigation and social media; he has over a dozen of publications in this field.

Prof. AlZu'bi has his fingerprint on some engineering applications such as smart localization. Many other research interest that can be considered as intelligent systems have been implemented by Prof. AlZu'bi team, recommender systems for several application have been implemented as well.

In addition to his extensive work in the field of AI and intelligent systems, Prof. AlZu'bi has also been actively involved in exploring the cutting-edge applications of large language models like Chat GPT and their role in reshaping the future of engineering. His research endeavors in this domain are paving the way for innovative developments in NLP and conversational AI.

Prof. AlZu'bi recognizes the transformative potential of large language models in engineering, where they can be applied to enhance HCI and improve decision-making processes. By delving into the realms of Chat GPT and related technologies, he is pushing the boundaries of what these models can achieve in the context of engineering applications.

1. Teaching Experience

1.1. Undergraduate Courses

- **1.1.1.** Discrete Mathematics
- **1.1.2.** Programming Concepts
- **1.1.3.** Introduction into Computer Science
- **1.1.4.** Digital Logic Design
- **1.1.5.** Computer organization
- **1.1.6.** Computer Architecture
- **1.1.7.** Computer Algorithms
- **1.1.8.** Data Structures
- **1.1.9.** Operating Systems
- **1.1.10.** Image Processing
- **1.1.11.** Computer Vision
- **1.1.12.** Introduction into Multimedia Systems





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- **1.1.13.** Multimedia Systems Voice
- **1.1.14.** Multimedia Systems Digital Imaging
- **1.1.15.** Machine learning Applications
- **1.1.16.** Special Topics in Computer Networks
- **1.1.17.** Special Topics in Computer Science
- **1.1.18.** Special Programming Languages
- 1.1.19. Intelligent Systems
- **1.1.20.** Internet of Things

1.2. Graduate Courses

- **1.2.1.** Advanced Operating Systems
- 1.2.2. Advanced Digital Image Processing
- **1.2.3.** Advanced Intelligent Systems
- **1.2.4.** Research methodologies
- **1.2.5.** Symposium on the computer science

2. Membership of Committees

- **2.1.1.** Commission for Equation, Guidance, Training and Follow-up of Graduates in the Department of Computer Science / Faculty of Science and Information Technology
- **2.1.2.** Member of the Quality Assurance Committee in the Department of Multimedia Systems / Faculty of Science and Information Technology
- **2.1.3.** Chair for several conferences and workshops such as: SDS, SNAMS, SAMSN, IOTSMS, ICIT
- **2.1.4.** Commission for Equation, Guidance, Training and Follow-up of Graduates in the Department of Computer Science / Faculty of Science and Information Technology
- **2.1.5.** Member of the Study Plans Committee Department of Computer Science / Faculty of Science and Information Technology
- **2.1.6.** Member of the Committee for Equation, Guidance, Training and Follow-up of Graduates in the Department of Multimedia Systems / Faculty of Science and Information Technology
- **2.1.7.** Member of the Quality Assurance Committee in the Department of Multimedia Systems / Faculty of Science and Information Technology
- **2.1.8.** Member of the Quality Assurance Committee at the College of Science and Information Technology
- **2.1.9.** Member of IEEE society Jordan Section
- **2.1.10.** Member of Jordanian Engineering Association (JEA)
- **2.1.11.** Editor in cluster computing journal
- **2.1.12.** Editor in Journal of Engineering Mathematics
- **2.1.13.** Editor in Engineering Applications of Artificial Intelligence journal
- **2.1.14.** Editor in Sustainability MDPI journal
- **2.1.15.** Editor in Journal of Universal Computer Science





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3. Skills

- 3.1. Have experience in Quality Assurance at Universities. Part of the responsible committee at Zaytoonah University of Joradan since 2012 till current
- 3.2. Professional in image processing areas especially medical and security areas
- 3.3. Excellent in managing and forming research teams based on the hottest research areas
- 3.4. Excellent in working under pressure
- 3.5. Excellent on employing AI ideas in real life for research challenges.
- 3.6. Programming:

Matlab : Professional

Python : GoodVisual Studio.Net : GoodJAVA : Good

• ASP.Net : Good

- 3.7. Excellent in the modern medical informatics systems
- 3.8. Excellent in teaching skills
- 3.9. Very interesting in team work
- 3.10. Very good social relations
- 3.11. Speak, Read, and Write perfectly English and Arabic.

4. Grants

- Operations on blood banks and improving the blood donation process in Jordan
 - o Grant Number: 12 / 18 / 2018-2019
 - o Grant total amount: \$ 20 000
 - o Funder: Al Zaytoonah University of Jordan
- Using artificial intelligence and modern sentiment analysis techniques to enhance intelligent analysis of student cases
 - o Grant Number: 09 / 07 / 2022-2023
 - o Grant total amount: \$ 11 000
 - o Grant total amount: Funder: Al Zaytoonah University of Jordan
- Automatic detection of deepfake speech for the University of Al-Zaytoonah on social media platforms
 - o Grant Number: 27 / 11 / 2022-2023
 - o Grant total amount: \$ 9 500
 - o Funder: Al Zaytoonah University of Jordan





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5. Publications

5.1. Journal Papers:

- **5.1.1.** Shadi AlZu'bi and Abbes Amira. 2010. 3D Medical Volume Segmentation Using Hybrid Multiresolution Statistical Approaches. Advances in Artificial Intelligence 2010, Article ID 520427 (June 2010), 15 pages. DOI=https://doi.org/10.1155/2010/520427.
- 5.1.2. Shadi AlZu'bi, Naveed Islam, and Maysam Abbod. 2011. Multiresolution analysis using wavelet, ridgelet, and curvelet transforms for medical image segmentation. Journal of Biomedical Imaging 2011, Article 4 (January 2011), 18 pages. DOI=http://dx.doi.org/10.1155/2011/136034
- 5.1.3. Shadi AlZu'bi, Al-Ayyoub, M., Jararweh, Y., Shehab, M. A., & Gupta, B. B. 2018. Accelerating 3D medical volume segmentation using GPUs. Multimedia Tools and Applications, Volume 77(4), pages 4939-4958. ISSN 1573-7721. https://doi.org/10.1007/s11042-016-4218-0
- 5.1.4. Shadi AlZu'bi, Mahmoud Al-Ayyoub, Yaser Jararweh, Mohammed A. Shehab. 2017. Enhanced 3D segmentation techniques for reconstructed 3D medical volumes: Robust and Accurate Intelligent System. Procedia Computer Science. Volume 113 (c), Pages 531-538. ISSN 1877-0509. DOI=https://doi.org/10.1016/j.procs.2017.08.318.
- 5.1.5. Shadi AlZu'bi, Raddad Abooraig, Tarek Kanan, Bilal Hawashin, Mahmoud Al Ayoub, Ismail Hmeidi. 2018. Automatic categorization of Arabic articles based on their political orientation. Digital Investigation, Volume 25, Pages 24-41. ISSN 1742-2876.

 DOI=https://doi.org/10.1016/j.diin.2018.04.003.
 (http://www.sciencedirect.com/science/article/pii/S1742287618300203)
- **5.1.6. Shadi AlZu'bi**, Mohammad Shehab, Mahmoud Al-Ayyoub, Yaser Jararweh, and Brij Gupta. "Parallel Implementation for 3D Medical Volume Fuzzy Segmentation", Pattern Recognition Letters, journal homepage: www.elsevier.com (2018).
- **5.1.7.** Al-Ayyoub, M., **Shadi AlZu'bi**, Jararweh, Y., Shehab, M.A. and Gupta, B.B., 2018. Accelerating 3D medical volume segmentation using GPUs. Multimedia Tools and Applications, 77(4), pp.4939-4958.
- **5.1.8. Shadi AlZu'bi**, Jararweh, Y., Al-Zoubi, H., Elbes, M., Kanan, T. and Gupta, B., 2018. Multi-orientation geometric medical volumes segmentation using 3D multiresolution analysis. Multimedia Tools and Applications, pp.1-26.
- **5.1.9.** Al-Zoubi, H., **Shadi AlZu'bi**, Stamatakis, S. and Almimi, H., 2018. Ruled Surfaces of Finite Chen-Type. Journal for Geometry and Graphics, 22(1), pp.015-020.
- **5.1.10.** Shadi AlZu'bi, Hawashin, B., Mujahed, M., Jararweh, Y. and Gupta, B.B., 2019. An efficient employment of internet of multimedia things in smart and future agriculture. Multimedia Tools and Applications, pp.1-25.
- **5.1.11.** Obeidat, I.M., Mughaid, A. and **Shadi AlZu'bi**, 2019. A Secure Encrypted Protocol for Clients' Handshaking in the Same Network. International Journal of Interactive Mobile Technologies, 13(5).
- **5.1.12.** Hawashin, B., **Shadi AlZu'bi**, Kanan, T. and Mansour, A., 2019. An efficient semantic recommender method for Arabic text. The Electronic Library, 37(2), pp.263-280.
- **5.1.13.** Elbes, M., **Shadi AlZu'bi**, Kanan, T., Al-Fuqaha, A. and Hawashin, B., 2019. A survey on particle swarm optimization with emphasis on engineering and network applications. Evolutionary Intelligence, pp.1-17.
- **5.1.14. Shadi AlZu'bi**, AlQatawneh, S., ElBes, M. and Alsmirat, M., Transferable HMM probability matrices in multi-orientation geometric medical volumes segmentation. Concurrency and Computation: Practice and Experience, p.e5214.
- **5.1.15.** Muhairat, M., **Shadi AlZu'bi**, Hawashin, B., Elbes, M. and Al-Ayyoub, M., 2020. An Intelligent Recommender System Based on Association Rule Analysis for Requirement Engineering. Journal of Universal Computer Science, 26(1), pp.33-49.
- **5.1.16.** Elbes, M., Alrawashdeh, T., Almaita, E., **Shadi AlZu'bi** and Jararweh, Y., A platform for power management based on indoor localization in smart buildings using long short-term neural networks. Transactions on Emerging Telecommunications Technologies, p.e3867.
- 5.1.17. Shadi AlZu'bi, 2020. Secure 3D medical Imaging. arXiv preprint arXiv:2010.03367.
- **5.1.18.** Alsmadi, A., **Shadi AlZu'bi**, Al-Ayyoub, M. and Jararweh, Y., 2020. Predicting Helpfulness of Online Reviews. arXiv preprint arXiv:2008.10129.





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- **5.1.19.** Alasal, S.A., Alsmirat, M., Baker, Q.B. and **Shadi AlZu'bi**, 2020. Lumbar disk 3D modeling from limited number of MRI axial slices. International Journal of Electrical and Computer Engineering, 10(4), p.4101.
- **5.1.20. Shadi AlZu'bi**, Hawashin, B., Mughaid, A. and Baker, T., 2020. Efficient 3D medical image segmentation algorithm over a secured multimedia network. Multimedia Tools and Applications, pp.1-19.
- **5.1.21.** Hawashin, B., Aqel, D., **Shadi AlZu'bi** and Elbes, M., 2020. Improving recommender systems using co-appearing and semantically correlated user interests. Recent Advances in Computer Science and Communications (Formerly: Recent Patents on Computer Science), 13(2), pp.240-247.
- **5.1.22.** Shadi AlZu'bi, Hawashin, B., Mujahed, M., Jararweh, Y. and Gupta, B.B., 2019. An efficient employment of internet of multimedia things in smart and future agriculture. Multimedia Tools and Applications, 78(20), pp.29581-29605.
- **5.1.23.** Alsmadi, A., **Shadi AlZu'bi**, Al-Ayyoub, M. and Jararweh, Y., 2020. Predicting Helpfulness of Online Reviews. arXiv preprint arXiv:2008.10129.
- **5.1.24.** Lafi, M., Hawashin, B. and **Shadi AlZu'bi**, 2021. Eliciting Requirements from Stakeholders' Responses Using Natural Language Processing. Computer Modeling in Engineering & Sciences, 127(1), pp.99-116.
- 5.1.25. Shadi AlZu'bi, "Secure 3D medical Imaging." arXiv preprint arXiv:2010.03367 (2020).
- **5.1.26.** Alkhatib, A.A., Alsabbagh, A., Maraqa, R. and **Shadi AlZu'bi**, Load Balancing Techniques in Cloud Computing: Extensive Review.
- **5.1.27.** Aqel, D., **Shadi AlZu'bi**, Mughaid, A. and Jararweh, Y., 2021. Extreme learning machine for plant diseases classification: a sustainable approach for smart agriculture. Cluster Computing, pp.1-14.
- **5.1.28.** Mughaid, A., **Shadi AlZu'bi**, Al Arjan, A., Al-Amrat, R., Alajmi, R., Zitar, R. A., & Abualigah, L. (2022). An intelligent cybersecurity system for detecting fake news in social media websites. Soft Computing, 26(12), 5577-5591.
- **5.1.29. Shadi AlZu'bi**, Aqel, D., & Lafi, M. (2022). An intelligent system for blood donation process optimization-smart techniques for minimizing blood wastages. Cluster Computing, 1-11.
- **5.1.30.** Shadi AlZu'bi, Abu Zitar, R., Hawashin, B., Abu Shanab, S., Zraiqat, A., Mughaid, A., ... & Abualigah, L. (2022). A Novel Deep Learning Technique for Detecting Emotional Impact in Online Education. Electronics, 11(18), 2964.
- **5.1.31.** Mughaid, A., **Shadi AlZu'bi**, Hnaif, A., Taamneh, S., Alnajjar, A., & Elsoud, E. A. (2022). An intelligent cyber security phishing detection system using deep learning techniques. Cluster Computing, 1-10.
- **5.1.32.** Hussein, F., Mughaid, A., **Shadi AlZu'bi**, El-Salhi, S. M., Abuhaija, B., Abualigah, L., & Gandomi, A. H. (2022). Hybrid CLAHE-CNN Deep Neural Networks for Classifying Lung Diseases from X-ray Acquisitions. Electronics, 11(19), 3075.
- **5.1.33.** Mughaid, A., **Shadi AlZu'bi**, Alnajjar, A., AbuElsoud, E., Salhi, S. E., Igried, B., & Abualigah, L. (2022). Improved dropping attacks detecting system in 5g networks using machine learning and deep learning approaches. Multimedia Tools and Applications, 1-23.
- **5.1.34. Shadi AlZu'bi**, Zraiqat, A., & Hendawi, S. (2022). Sustainable Development: A Semantics-aware Trends for Movies Recommendation System using Modern NLP. Int. J. Advance Soft Compu. Appl, 14(3).
- **5.1.35.** Alkhatib, A. A., Maria, K. A., **Shadi AlZu'bi**, & Maria, E. A. (2022). Smart Traffic Scheduling for Crowded Cities Road Networks. Egyptian Informatics Journal.
- 5.1.36. Theng, L. W., San, M. M., Cheng, O. Z., Shen, W. W., Sumari, P., Abualigah, L., ... & Shadi AlZu'bi. (2023). Salak Image Classification Method Based Deep Learning Technique Using Two Transfer Learning Models. In Classification Applications with Deep Learning and Machine Learning Technologies (pp. 67-105). Springer, Cham.
- 5.1.37. Mughaid, Ala, Shadi AlZu'bi, Adnan Hnaif, Salah Taamneh, Asma Alnajjar, and Esraa Abu Elsoud. "An intelligent cyber security phishing detection system using deep learning techniques." Cluster Computing 25, no. 6 (2022): 3819-3828.
- **5.1.38.** Mughaid, Ala, Ibrahim Obaidat, Ashraf Aljammal, **Shadi AlZu'bi**, Fatima Quiam, D. Laila, Aseel Alzou'bi, and Laith Abualigah. "Simulation and analysis performance of ad-hoc routing protocols under





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- DDoS attack and proposed solution." International Journal of Data and Network Science 7, no. 2 (2023): 757-764.
- **5.1.39. Shadi AlZu'bi**, Ala Mughaid, Fatima Quiam, and Samar Hendawi. "Exploring the Capabilities and Limitations of ChatGPT and Alternative Big Language Models." In Artificial Intelligence and Applications. 2022.
- **5.1.40.** Mughaid, Ala, Ibrahim Obeidat, **Shadi AlZu'bi**, Esraa Abu Elsoud, Asma Alnajjar, Anas Ratib Alsoud, and Laith Abualigah. "A novel machine learning and face recognition technique for fake accounts detection system on cyber social networks." Multimedia Tools and Applications (2023): 1-26.
- **5.1.41.** Shadi AlZu'bi, Mohammad Elbes, Ala Mughaid, Noor Bdair, Laith Abualigah, Agostino Forestiero, and Raed Abu Zitar. "Diabetes monitoring system in smart health cities based on big data intelligence." Future Internet 15, no. 2 (2023): 85.
- **5.1.42.** Mughaid, Ala, **Shadi AlZu'bi**, Asma Alnajjar, Esraa AbuElsoud, Subhieh El Salhi, Bashar Igried, and Laith Abualigah. "Improved dropping attacks detecting system in 5g networks using machine learning and deep learning approaches." Multimedia Tools and Applications 82, no. 9 (2023): 13973-13995.
- **5.1.43.** Igried, Bashar, **Shadi AlZu'bi**, Darah Aqel, Ala Mughaid, Iyad Ghaith, and Laith Abualigah. "An Intelligent and Precise Agriculture Model in Sustainable Cities Based on Visualized Symptoms." Agriculture 13, no. 4 (2023): 889.
- 5.1.44. Kanan, Tarek, Amani AbedAlghafer, Shadi AlZu'bi, Bilal Hawashin, Ala Mughaid, Ghassan Kanaan, and M. M. Kamruzzaman. "An Intelligent Health Care System for Detecting Drug Abuse in Social Media Platforms Based on Low Resource Language." IEEE/ACM Transactions on Audio, Speech, and Language Processing (2023).
- **5.1.45.** Jararweh, Yaser, Sana Fatima, Moath Jarrah, and **Shadi AlZu'bi**. "Smart and sustainable agriculture: Fundamentals, enabling technologies, and future directions." Computers and Electrical Engineering 110 (2023): 108799.
- **5.1.46.** Obeidat, Ibrahim, Ala Mughaid, **Shadi AlZu'bi**, Ahmed AL-Arjan, Rula AL-Amrat, Rathaa AL-Ajmi, Razan AL-Hayajneh, Belal Abuhaija, and Laith Abualigah. "A novel secure cryptography model for data transmission based on Rotor64 technique." Multimedia Tools and Applications (2023): 1-20.
- **5.1.47. Shadi AlZu'bi**; Amjed Zreiqat; Worood Radi; Ala Mughaid; Laith Abualigah, 2022. An Intelligent Healthcare Monitoring System-based Novel Deep Learning Approach for Detecting COVID-19 from X-Rays Images, Physical and Engineering Sciences in Medicine. [under publication]
- **5.1.48.** Mughaid, Ala, **Shadi AlZu'bi**, Adel AlZioud, and Alaa Al Ghazo. "SCADA Authentication Identification Over The Next Generation CyberNet." (2022). [under publication]

5.2. Conferences

- 5.2.1. Shadi AlZu'bi, Naveed Islam and Maysam Abbod, "3D Multiresolution Analysis for Reduced Features Segmentation of Medical Volumes Using PCA," 2010 IEEE Asia Pacific Conference on Circuits and Systems (APCCAS 2010), issue Dec 2010, pp. 604-607, ISBN: 978-1-4244-7454-7 Kuala Lumpur, Malaysia, 2010.
- 5.2.2. Shadi AlZu'bi, Naveed Islam and Maysam Abbod, "Enhanced Hidden Markov Models for Accelerating Medical Volumes Segmentation," The 6th 2011 IEEE GCC Conference and Exhibition (IEEE GCC), issue Feb 2011, pp. 287-290, ISBN: 978-1-61284-118-2, Dubai, UAE, 2011.
- 5.2.3. Hamideh Rezaee, Ali Aghagolzadeh, M. Hadi Seyedarabi and Shadi AlZu'bi, "Tracking and Occlusion Handling in Multi- Sensor Networks by Particle Filter," The 6th 2011 IEEE GCC Conference and Exhibition (IEEE GCC), issue Feb 2011, pp. 397-400, ISBN: 978-1-61284-118-2, Dubai, UAE, 2011.
- 5.2.4. Shadi AlZu'bi, Saeed Sherif and Maysam Abbod, "Efficient Implementation and Evaluation of Wavelet Packet for Medical Image Segmentation," 2011 IEEE International Workshop on Medical Measurements and Applications Proceedings (MeMeA), Issue May 2011, pp. 619-622, ISBN: 978-1-4244-9336-4, Bari, Italy, May, 2011.
- **5.2.5.** Shadi AlZu'bi Saeed Sherif, Navid Islam and Maysam Abbod, "Multi-Resolution Analysis using Curvelet and Wavelet Transforms for Medical Imaging," 2011 IEEE International Workshop on





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- Medical Measurements and Applications Proceedings (MeMeA), Issue May 2011, pp. 188-191, ISBN: 978-1-4244-9336-4, Bari, Italy, May, 2011.
- 5.2.6. Yaser Jararweh, Salim Hariri and Shadi AlZu'bi, "An Optimal Multi-Processor Allocation Algorithm for High Performance GPU Accelerators," 2011 IEEE Jordan Conference on Applied Electrical Engineering and Computing Technologies (AEECT), issue Dec 2011, pp. 1-6, ISBN: 978-1-4577-1083-4, Amman, Jordan, Dec, 2011.
- 5.2.7. Shadi AlZu'bi and Yaser Jararweh, "Medical Volume Segmentation Using 3D Multiresolution Analysis," 8th IEEE International Conference on Innovations in Information Technology (IIT '12), AL AIN, UAE, March 2012.
- **5.2.8.** Shadi AlZu'bi and Yaser Jararweh, "Reduced Features Medical Volume Segmentation Using 3D Multiresolution Analysis and PCA," The 3rd International Conference on Multimedia Computing and Systems (ICMCS'12), Tangier, Morocco, May 2012.
- 5.2.9. Shadi AlZu'bi and Yaser Jararweh, "Exploiting GPUs for Compute Intensive Medical Applications," The 3rd International Conference on Multimedia Computing and Systems (ICMCS'12), Tangier, Morocco, May 2012.
- **5.2.10.** Shadi AlZu'bi and Abbes Amira, "Efficient Implementation of Wavelet Packet for Medical Image Segmentation and Analysis," The second SED research student conference (RESCON 2009), Brunel University-West London, June, 2009.
- **5.2.11.** Shadi AlZu'bi and Maysam Abbod, "3D Multiresolution Analysis for Segmenting Reduced Features Medical Volumes Using PCA," The Third SED research student conference (RESCON 2010), Brunel University-West London, June, 2010.
- **5.2.12.** Shadi AlZu'bi, Ansam Abu-Dalo, Yaser Jararweh, Mahmoud Al-Ayyoub and Mohammad Alsmirat, "A GPU-Based Breast Cancer Detection System Using Fuzzy C-Means Clustering Algorithm," 5th international conference on Multimedia Computing and Systems (ICMCS'16), Marrakesh, Morocco
- 5.2.13. Shadi AlZu'bi, Moahmmed A. Shehab, Mahmoud Al-Ayyoub, Elhadj Benkhelifa, Yaser Jararweh, "Parallel implementation of FCM-based volume segmentation of 3D images", Computer Systems and Applications (AICCSA) 2016 IEEE/ACS 13th International Conference of, pp. 1-6, 2016, ISSN 2161-5330
- 5.2.14. Shadi AlZu'bi, Bilal Hawashin, Mohammad ElBes, and Mahmoud Al-Ayyoub, "A Novel Recommender System based on Apriori Algorithm for Requirements Engineering," The Fifth International Conference on Social Networks Analysis, Management and Security(SNAMS-2018), In Press. Valencia, Spain. Will be available online at ieeexplore.ieee.org.
- 5.2.15. Shadi AlZu'bi, Sokyna Al-Qatawneh and Mohammad Alsmirat, "Transferable HMM Trained Matrices for Accelerating Statistical Segmentation Time," The Fifth International Conference on Social Networks Analysis, Management and Security(SNAMS-2018), In Press. Valencia, Spain. Will be available online at ieeexplore.ieee.org.
- **5.2.16.** Hawashin, B., Mansour, A., Abukhait, J., Khazalah, F., Shadi AlZu'bi, Kanan, T., Obaidat, M. and Elbes, M., 2019, April. Efficient texture classification using independent component analysis. In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT) (pp. 544-547). IEEE.
- 5.2.17. Shadi AlZu'bi, Mughaid, A., Hawashin, B., Elbes, M., Kanan, T., Alrawashdeh, T. and Aqel, D., 2019, April. Reconstructing Big Data Acquired from Radioisotope Distribution in Medical Scanner Detectors. In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT) (pp. 325-329). IEEE.
- 5.2.18. Elbes, M., Almaita, E., Alrawashdeh, T., Kanan, T., Shadi AlZu'bi and Hawashin, B., 2019, April. An indoor localization approach based on deep learning for indoor location-based services. In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT) (pp. 437-441). IEEE.
- 5.2.19. Kanan, T., Sadaqa, O., Aldajeh, A., Alshwabka, H., Shadi AlZu'bi, Elbes, M., Hawashin, B. and Alia, M.A., 2019, April. A review of natural language processing and machine learning tools used to analyze arabic social media. In 2019 IEEE Jordan International Joint Conference on Electrical Engineering and Information Technology (JEEIT) (pp. 622-628). IEEE.





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- **5.2.20.** Aqel, D., Shadi AlZu'bi and Hamadah, S., 2019, June. Comparative Study for Recent Technologies in Arabic Language Parsing. In 2019 Sixth International Conference on Software Defined Systems (SDS) (pp. 209-212). IEEE.
- **5.2.21.** Hawashin, B., Aqel, D., Shadi AlZu'bi and Jararweh, Y., 2019, June. Novel weighted interest similarity measurement for recommender systems using rating timestamp. In 2019 Sixth International Conference on Software Defined Systems (SDS) (pp. 166-170). IEEE.
- 5.2.22. Shadi AlZu'bi, Alsmadiv, A., AlQatawneh, S., Al-Ayyoub, M., Hawashin, B. and Jararweh, Y., 2019, October. A brief analysis of amazon online reviews. In 2019 Sixth International Conference on Social Networks Analysis, Management and Security (SNAMS) (pp. 555-560). IEEE.
- 5.2.23. Shadi AlZu'bi, Badarneh, O., Hawashin, B., Al-Ayyoub, M., Alhindawi, N. and Jararweh, Y., 2019, October. Multi-Label Emotion Classification for Arabic Tweets. In 2019 Sixth International Conference on Social Networks Analysis, Management and Security (SNAMS) (pp. 499-504). IEEE.
- **5.2.24.** Shadi AlZu'bi, Aqel, D., Mughaid, A. and Jararweh, Y., 2019, October. A Multi-Levels Geo-Location based Crawling Method for Social Media Platforms. In 2019 Sixth International Conference on Social Networks Analysis, Management and Security (SNAMS) (pp. 494-498). IEEE.
- 5.2.25. Mughaid, A., Obeidat, I., Hawashin, B., Shadi AlZu'bi and Aqel, D., 2019, October. A smart Geo-Location Job Recommender System Based on Social Media Posts. In 2019 Sixth International Conference on Social Networks Analysis, Management and Security (SNAMS) (pp. 505-510). IEEE.
- 5.2.26. Ramadan, R., Alqatawneh, S., Ahalaiqa, F., Abdel-Qader, I., Aldahoud, A. and Shadi AlZu'bi, 2019, October. The Utilization of WhatsApp to Determine the Obsessive-Compulsive Disorder (OCD): A Preliminary Study. In 2019 Sixth International Conference on Social Networks Analysis, Management and Security (SNAMS) (pp. 561-564). IEEE.
- **5.2.27.** Shadi AlZu'bi, Alsmirat, M., Al-Ayyoub, M. and Jararweh, Y., 2019, November. Artificial Intelligence Enabling Water Desalination Sustainability Optimization. In 2019 7th International Renewable and Sustainable Energy Conference (IRSEC) (pp. 1-4). IEEE.
- **5.2.28.** Alsmadi, A., Shadi AlZu'bi, Hawashin, B., Al-Ayyoub, M. and Jararweh, Y., 2020, April. Employing Deep Learning Methods for Predicting Helpful Reviews. In 2020 11th International Conference on Information and Communication Systems (ICICS) (pp. 007-012). IEEE.
- 5.2.29. Shadi AlZu'bi, Hawashin, B., Mughaid, A. and Jararweh, Y., 2020, April. Whats Trending? An Efficient Trending Research Topics Extractor and Recommender. In 2020 11th International Conference on Information and Communication Systems (ICICS) (pp. 191-196). IEEE.
- **5.2.30.** Lafi, M., Hawashin, B. and Shadi AlZu'bi, 2020, April. Maintenance Requests Labeling Using Machine Learning Classification. In 2020 Seventh International Conference on Software Defined Systems (SDS) (pp. 245-249). IEEE.
- **5.2.31.** Hawashin, B., Shadi AlZu'bi, Mughaid, A., Fotouhi, F. and Abusukhon, A., 2020, April. An Efficient Cold Start Solution for Recommender Systems Based on Machine Learning and User Interests. In 2020 Seventh International Conference on Software Defined Systems (SDS) (pp. 220-225). IEEE.
- **5.2.32.** Abusukhon, A. and Shadi AlZu'bi, 2020, April. New Direction of Cryptography: A Review on Text-to-Image Encryption Algorithms Based on RGB Color Value. In 2020 Seventh International Conference on Software Defined Systems (SDS) (pp. 235-239). IEEE.
- 5.2.33. Shadi AlZu'bi and Jararweh, Y., 2020, April. Data Fusion in Autonomous Vehicles Research, Literature Tracing from Imaginary Idea to Smart Surrounding Community. In 2020 Fifth International Conference on Fog and Mobile Edge Computing (FMEC) (pp. 306-311). IEEE.
- **5.2.34.** AlKhatib, A.A., Sawalha, T. and Shadi AlZu'bi, 2020, April. Load Balancing Techniques in Software-Defined Cloud Computing: an overview. In 2020 Seventh International Conference on Software Defined Systems (SDS) (pp. 240-244). IEEE.
- **5.2.35.** Abushanap, S.A., Abdalla, A.M., Tamimi, A.A. and Shadi AlZu'bi, 2021, July. A Survey of Human Face Recognition for Partial Face View. In 2021 International Conference on Information Technology (ICIT) (pp. 571-576). IEEE.
- **5.2.36.** Shadi AlZu'bi, Aqel, D. and Mughaid, A., 2021, July. Recent intelligent Approaches for Managing and Optimizing smart Blood Donation process. In 2021 International Conference on Information Technology (ICIT) (pp. 679-684). IEEE.





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- **5.2.37.** Al-Arjan, A., Rasmi, M. and Shadi AlZu'bi, 2021, July. Intelligent security in the era of AI: The key vulnerability of RC4 algorithm. In 2021 International Conference on Information Technology (ICIT) (pp. 691-694). IEEE.
- 5.2.38. Hawashin, B., Mansour, A., Fotouhi, F., Shadi AlZu'bi and Kanan, T., 2021, July. A Novel Recommender System Using Interest Extracting Agents and User Feedback. In 2021 International Conference on Information Technology (ICIT) (pp. 674-678). IEEE.
- **5.2.39.** Kanan, T., AbedAlghafer, A., Kanaan, G.G., AlShalabi, R., Elbes, M. and Shadi AlZu'bi, 2021, July. Arabic Text Categorization: A Comparison Survey. In 2021 International Conference on Information Technology (ICIT) (pp. 739-742). IEEE.
- **5.2.40.** Quba, G.Y., Al Qaisi, H., Althunibat, A. and Shadi AlZu'bi, 2021, July. Software Requirements Classification using Machine Learning algorithm's. In 2021 International Conference on Information Technology (ICIT) (pp. 685-690). IEEE.
- **5.2.41.** Shadi AlZu'bi, Makki, Q.H., Ghani, Y.A. and Ali, H., 2021, July. Intelligent Distribution for COVID-19 Vaccine Based on Economical Impacts. In 2021 International Conference on Information Technology (ICIT) (pp. 968-973). IEEE.
- **5.2.42.** Hattawi, W., Shaban, S., Al Shawabkah, A. and Shadi AlZu'bi, 2021, July. Recent Quality Models in BigData Applications. In 2021 International Conference on Information Technology (ICIT) (pp. 811-815). IEEE.
- 5.2.43. Al Qaisi, H., Quba, G.Y., Althunibat, A., Abdallah, A. and Shadi AlZu'bi, 2021, July. An Intelligent Prototype for Requirements Validation Process Using Machine Learning Algorithms. In 2021 International Conference on Information Technology (ICIT) (pp. 870-875). IEEE.
- **5.2.44.** Abdelgani, Y., Makki, Q. H., Ali, H., & Shadi AlZu'bi (2022, June). Intelligent Covid-19 Vaccine Supplychain Management System. In 2022 13th International Conference on Information and Communication Systems (ICICS) (pp. 373-378). IEEE.
- 5.2.45. Shadi AlZu'bi, Samia A. Abushanap, Islam AlTalahin, Ayman M. Abdalla, and Abdelfatah A. Tamimi. "Secure Transmission of Noisy Images over Fiber Optic Communication." In 2022 9th International Conference on Internet of Things: Systems, Management and Security (IOTSMS), pp. 1-5. IEEE, 2022
- **5.2.46.** Shadi AlZu'bi, Samai AbuShanab, Muder M. AlMi'Ani, and Ala Mughaid. "Transfer Learning Enabled CAD System for Monkey Pox Classification." In 2022 9th International Conference on Internet of Things: Systems, Management and Security (IOTSMS), pp. 1-5. IEEE, 2022.
- 5.2.47. Hendawi, Samar, Shadi AlZu'bi, Ala Mughaid, and Nayef Alqahtani. "Ensuring Cybersecurity While Leveraging Social Media as a Data Source for Internet of Things Applications." In International Conference on Advances in Computing Research, pp. 587-604. Cham: Springer Nature Switzerland, 2023.
- 5.2.48. Mughaid, Ala, Ali Alqahtani, Shadi AlZu'bi, Ibrahim Obaidat, Rabee Alqura'n, Mahmoud AlJamal, and Raid AL-Marayah. "Utilizing Machine Learning Algorithms for Effectively Detection IoT DDoS Attacks." In International Conference on Advances in Computing Research, pp. 617-629. Cham: Springer Nature Switzerland, 2023.
- **5.2.49.** Elbes, Mohammed, Shadi AlZu'bi, and Tarek Kanan. "Deep Learning-Based Earthquake Prediction Technique Using Seismic Data." In 2023 International Conference on Multimedia Computing, Networking and Applications (MCNA), pp. 103-108. IEEE, 2023.
- 5.2.50. Shadi AlZu'bi, Omar Badarneh, Bilal Hawashin, Mahmoud Al-Ayyoub, Nouh Alhindawi, and Kholoud Alsmearat. "Multi-Label Classification of Emotions in Arabic Tweets From Different Perspectives." In 2023 International Conference on Multimedia Computing, Networking and Applications (MCNA), pp. 33-41. IEEE, 2023.
- **5.2.51.** Hawashin, Bilal, Ahmad Althunibat, Tarek Kanan, Shadi AlZu'bi, and Yousef Sharrab. "Improving Arabic Fake News Detection Using Optimized Feature Selection." In 2023 International Conference on Information Technology (ICIT), pp. 690-694. IEEE, 2023.
- **5.2.52.** Abu-Shanab, Samia A., Shadi AlZu'bi, and Amjad Zraiqat. "A Novel Virtual Cosmetics Recommender System Based On Pre-Trained Computer Vision Models." In 2023 International Conference on Information Technology (ICIT), pp. 765-770. IEEE, 2023.
- 5.2.53. AlJamal, Mahmoud, Rabee Alquran, AL-Aiash Issa, Ala Mughaid, Shadi AlZu'bi, and Ala A. Abutabanjeh. "A Novel Machine Learning Cyber Approach for Detecting WannaLocker Ransomware





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- Attack on Android Devices." In 2023 International Conference on Information Technology (ICIT), pp. 135-142. IEEE, 2023.
- **5.2.54.** Altalahin, Islam, Shadi AlZu'bi, Assal Alqudah, and Ala Mughaid. "Unmasking the Truth: A Deep Learning Approach to Detecting Deepfake Audio Through MFCC Features." In 2023 International Conference on Information Technology (ICIT), pp. 511-518. IEEE, 2023.
- 5.2.55. Shadi AlZu'bi, Samar Hendawi, Mohammed Elbes, Tarek Kanan, and Ala Mughaid. "Towards a Sustainable Future: Exploring Key Features, Challenges, and Global Examples of Building Smart Cities." In 2023 International Conference on Information Technology (ICIT), pp. 284-291. IEEE, 2023.
- **5.2.56.** Bdair, Noor, Wael Alzyadat, and Shadi AlZu'bi. "Intelligent Model for Optimizing Gantt Chart in the Planning Stage." In 2023 International Conference on Information Technology (ICIT), pp. 556-560. IEEE, 2023.
- **5.2.57.** Hendawi, Samar, Islam Altalahin, Shadi AlZu'bi, and Ayman Abdalla. "Diameter-Constrained Minimum Spanning Tree Problems: A Survey." In 2023 International Conference on Information Technology (ICIT), pp. 771-774. IEEE, 2023.
- 5.2.58. Elbes, Mohammed, Samar Hendawi, Shadi AlZu'bi, Tarek Kanan, and Ala Mughaid. "Unleashing the Full Potential of Artificial Intelligence and Machine Learning in Cybersecurity Vulnerability Management." In 2023 International Conference on Information Technology (ICIT), pp. 276-283. IEEE, 2023.
- **5.2.59.** Kanan, Tarek, Samar Hendawi, Shadi AlZu'bi, Mohammed Elbes, and Ala Mughaid. "Revolutionizing Cyberbullying Prevention: A Cutting-Edge Natural Language Processing-Based Approach." In 2023 International Conference on Information Technology (ICIT), pp. 220-225. IEEE, 2023.
- **5.2.60.** Quiam, Fatima, Assal AM Alqudah, Maher A. Nabulsi, and Shadi AlZu'bi. "Examining the Validity of Inference Rules: Utilizing Truth Tables and Contrapositive Analysis." In 2023 International Conference on Information Technology (ICIT), pp. 620-624. IEEE, 2023.

5.3. Invited Poster Conferences

- **5.3.1.** Shadi AlZu'bi and Abbes Amira, "Multiresolution statistical Approaches for 3D medical Imaging," The graduate school research student poster conference, Brunel University-West London, May, 2009.
- 5.3.2. Shadi AlZu'bi and Abbes Amira, "Efficient Implementation of Wavelet Packet for Medical Image Segmentation and Analysis," The second SED research student poster conference (RESCON 2009), Brunel University-West London, June, 2009.
- **5.3.3.** Shadi AlZu'bi, "Multiresolution Analysis for Medical Image Segmentation," The 6th 2011 IEEE GCC Conference and Exhibition (IEEE GCC), Dubai, UAE, 2011.





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6. Others

- Recognized to be listed in the top 2% scientists in the world according to Stanford University's statistical analysis of scientific contributions and impact.
- I supervise a multiple master student projects in several universities and examine many of others as well.
- Awarded "The Ali Al-Qirem Award for Outstanding Researcher at the University of Al-Zaytoona in Jordan."
- Awarded <u>two</u> vice chancellor prizes in Brunel University which has been given to five research students quarterly in the academic session 2010 / 2011.
- Enter the 2011 IEEE Gulf Cooperation Council student conference poster competition, and has been chosen with 14 other students to present our novel work in the conference which has been held in Dubai from 19 to 22 of FEB/2011.
- I am doing some volunteer work to help the special needs people to encourage them to be engaged in the national committee. This is by illuminating some successful study cases in a pre-scheduled events and public places.