EAST TEXAS A&M

Curriculum Vita
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EDUCATION

Doctor of Philosophy in Computer Engineering
Wayne State University, 2013

Masters in Computer Science
New York Institute of Technology, 2003

BSc in Computer Science
Jordan University of Science and Technology, 2002

TEACHING EXPERIENCE

January 2025 – present, Assistant Professor, College of Science and Engineering, East Texas A&M, USA

September 2020 – December 2024, Associate Professor, College of Computing and Informatics, University of Sharjah, United Arab Emirates.

September 2018 – August 2020, Associate Professor, College of Computer and Information Technology, Jordan University of Science and Technology, Jordan

September 2013 – August 2018, Assistant Professor, College of Computer and Information Technology, Jordan University of Science and Technology, Jordan

PUBLICATIONS

1. *Al-Alem, F., Alsmirat, M. A., & Al-Ayyoub, M. (2016). On the road to the Internet of Biometric Things: A survey of fingerprint acquisition technologies and fingerprint databases. 2016 IEEE/ACS 13th International Conference of Computer Systems and Applications (AICCSA), 1–6. https://doi.org/10.1109/AICCSA.2016.7945781*
2. *Ababneh, A., Al-Ayyoub, M., Jararweh, Y., & Alsmirat, M. (2017). Collision-free anycast transmission scheduling in UWSNs. 2017 Second International Conference on Fog and Mobile Edge Computing (FMEC), 207–212. https://doi.org/10.1109/FMEC.2017.7944747*
3. *Alasal, S. A., Alsmirat, M., Baker, Q. B., & Jararweh, Y. (2018). Improving passive 3D model reconstruction using image enhancement. 2018 6th International Conference on Multimedia Computing and Systems (ICMCS), 1–7. https://doi.org/10.1109/ICMCS.2018.8525997*
4. *Alasal, S. A., Alsmirat, M., Al-Mnayyis, A., & Al-Ayyoub, M. (2021). Improving radiologists' and orthopedists' QoE in diagnosing lumbar disk herniation using 3D modeling. International Journal of Electrical & Computer Engineering, 11(5). https://doi.org/10.11591/ijece.v11i5.pp-*
5. *Alawneh, K., Al-Dwiekat, M., Alsmirat, M., & Al-Ayyoub, M. (2015). Computer-aided diagnosis of lumbar disc herniation. 2015 6th International Conference on Information and Communication Systems (ICICS), 286–291. https://doi.org/10.1109/ICICS.2015.7171450*
6. *Al-Ayyoub, M., Jararweh, Y., Doulat, A., Salameh, H. A. B., Al Abed, A. A., Alsmirat, M., & Khreishah, A. A. (2016). Virtualization-based cognitive radio networks. Journal of Systems and Software, 117, 15–29. https://doi.org/10.1016/j.jss.2016.03.041*
7. *Al-Ayyoub, M., AlZu'bi, S. M., Jararweh, Y., & Alsmirat, M. A. (2016). A gpu-based breast cancer detection system using single pass fuzzy c-means clustering algorithm. 2016 5th International Conference on Multimedia Computing and Systems (ICMCS), 650–654. https://doi.org/10.1109/ICMCS.2016.7905624*
8. *Al-Ayyoub, M., Al-Mnayyis, N., Alsmirat, M. A., Alawneh, K., Jararweh, Y., & Gupta, B. B. (2018). SIFT based ROI extraction for lumbar disk herniation CAD system from MRI axial scans. Journal of Ambient Intelligence and Humanized Computing. https://doi.org/10.1007/s12652-018-0919-4*
9. *Alketbi, M. M., Alfalasi, H. R., Alsmirat, M., & Sharrab, Y. (2023). Detecting distracted drivers using convolutional neural networks. 2023 Fourth International Conference on Intelligent Data Science Technologies and Applications (IDSTA), 59–66. https://doi.org/10.1109/IDSTA58434.2023.10260424*
10. *Al-Mnayyis, A., Alasal, S. A., Alsmirat, M., Baker, Q. B., & AlZu'bi, S. (2020). Lumbar disk 3D modeling from limited number of MRI axial slices. Int. J. Electr. Comput. Eng., 10(4), 4101–4108. https://doi.org/10.11591/ijece.v10i4.pp4101-4108*
11. *Al Rayes, L., Haggag, M., & Alsmirat, M. (2024). Leveraging local binary patterns with transfer learning for face recognition in low-light conditions. 2024 International Conference on Multimedia Computing, Networking and Applications (MCNA), 28–34. https://doi.org/10.1109/MCNA61413.2024.10444372*

12. *Alsalama, A., Kubba, A., Alsmirat, M., & Al Jawarneh, I. M. (2024). A novel approximate computing method for efficient search in satellite remote sensing products. 2024 International Conference on Multimedia Computing, Networking and Applications (MCNA), 21–27. https://doi.org/10.1109/MCNA61413.2024.10444342*
13. *Al-Saleh, M. I., Alsmirat, M. A., Jararweh, Y., & Obaidat, I. (2018). A unified key distribution and session management protocol for mobile video surveillance systems. 2018 Fifth International Conference on Internet of Things: Systems, Management and Security, 234–238. https://doi.org/10.1109/IoTSMS.2018.8641142*
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16. *Alsmirat, M. A., & Al-Rifai, S. Y., & Sababha, B. H. (2015). Reducing message loss in dsrc networks using dynamic distribution of safety messages over edca access categories. Proceedings of the World Congress on Engineering and Computer Science, 2.*
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41. *Alsmirat, M. A. (2010). Research Article Detailed Performance and Waiting-Time Predictability Analysis of Scheduling Options in On-Demand Video Streaming. EURASIP Journal on Image and Video Processing.*
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69. *Alzyout, M. S., & Alsmirat, M. A. (2020). Performance of design options of automated ARIMA model construction for dynamic vehicle GPS location prediction. Simulation Modelling Practice and Theory, 104, 102148. https://doi.org/10.1016/j.simpat.2020.102148*
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RESEARCH GRANTS AND AWARDS

- *September 2023, Forensics Human Identification Using Ethmoid Bone CT Scans and Machine Learning, Principle Investigator, University of Sharjah, $30K*
- *December 2022, Building a Deep Learning Compatible Image Re-targeted Set, Principle Investigator, University of Sharjah, $10K.*
- *December 2019, Advancing Precision Agriculture in Jordan: Using Computer Vision to Support the Sustainability and Quality of Olive Farming, Co-PI, The Royal Academy of Engineering, UK, $100K.*
- *September 2016, Impact of Image Compression on Fingerprint Recognition, Principle Investigator, Jordan University of Science and Technology, $14K.*
- *September 2014, A CAD System for Diagnosing and Classifying Disk Herniation Types from MRI Images, Principle Investigator, Jordan University of Science and Technology, $10K.*