Jalawi Sulaiman Alshudukhi

Associate Professor

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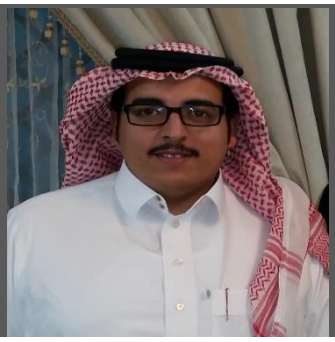

Educations:

Diploma in Computer Networks Engineering
New horizon Inst, Hail, Kingdom of Saudi Arabia
2006

Bachelor of Education in " Computer Science"
University of Hail, Hail, Kingdom of Saudi Arabia
2006

Master of Computer Networks
La Trobe University, Melbourne, Australia
2010

PhD in Computer Networks
Oxford Brookes University, Oxford, United Kingdom
2016

Experiences:

College of Technology, Hail, KSA
Trainer
3/2007 to 12/2007
Teaching: Network Operating Systems

University of Hail, Hail, KSA
Lecturer & Coop Training Program Coordinator
5/2011 to 8/2017
Teaching Network Security, Multimedia Engineering, C programming language for Engineering and Java programming.

University of Hail, Hail, KSA
Assistant Professor (**Chairman of Information and Computer Science Department**)
8/2017 to 8/2020
Teaching Operating Systems, Database Systems, Data and computers communication and Mobile computing.

University of Hail, Hail, KSA
Associate Professor (**Dean of College of Computer Science and Engineering**)
8/2020 to 8/2022

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Languages:

Arabic	●●●●●
English	●●●●●
French	●●●●

Certifications

(MCP) Microsoft Certification Professional	Hail	3 Month	Al-alamiah Institute
(CEH) Certified Ethical Hacker	Dubai	2 weeks	Sites Power Institute
(CISSP) Certified Information Systems Security Professional	Dubai	2 weeks	Sites Power Institute

Skills

Networks and Security	●●●●●	Wireless Communications	●●●●●
Network and Systems Simulation	●●●●●	Wireless Sensors Networks	●●●●●
Ad Hoc Networks	●●●●●	Network Protocols	●●●●●
MESH Networks	●●●●●	Information Security	●●●●●
Design and validate Algorithms	●●●●●	Mobile Application	●●●●○
Cisco Network Systems and Core	●●●●●	Real-time and distributed systems	●●●●●
Fault and Tolerance Systems	●●●●●	C, C++, Java, J2M	●●●●○
Software Engineering	●●●●○	Internet programming,PHP,HTML, etc	●●●●○
Systems Management	●●●●○	Research skills	●●●●●
Critical Thinking	●●●●●	Problem Solving	●●●●●
Team Leading	●●●●●	Motivate the teamwork	●●●●●

Memberships:

- IEEE Membership: since Sep 2012– Present
- IEEE Communications Society Membership: since Apr 2013 – Present
- IEEE Sensors Council: since Sep 2012 – Present
- SSSS (scientific society for Saudi students in UK) Membership: since Feb 2014- Present

Conferences:

- ICCIT 2012, 1st Taibah University International Conference on Computing and Information Technology, Al-Madinah Al-Munawwarah, Saudi Arabia.
- weM2M 2014, International Workshop on Weightless Machine Communications, London, UK
- CSNDSP 2014: 9th IEEE/IET International Symposium on COMMUNICATION SYSTEMS, NETWORKS & DIGITAL SIGNAL PROCESSING, Manchester, UK.
- WNS3 2015, The Workshop on ns-3 (WNS3), Centre Tecnològic de Telecommunications de Catalunya (CTTC), Castelldefels (Barcelona), Spain.
- SAI 2015, Science and Information Conference 2015, London, UK.
- WiMob 2015, The 11th IEEE International Conference on Wireless and Mobile Computing, Networking and Communications, Abu-Dhabi, UAE.
- APMediaCast 2016, The 2nd Asia Pacific Conference on Multimedia and Broadcasting, Bali, Indonesia.
- ICSC 2019: The International Conference on Cybersecurity, Hail, Kingdom of Saudi Arabia
- ICSCA 2022: INTERNATIONAL CONFERENCE ON SMART COMPUTING AND APPLICATION, Hail, Kingdom of Saudi Arabia

Publications:

- J. Alshudukhi, S. Ou, and P. Ball, “A ground level radio propagation model for road-based wireless sensor networks,” in *Communication Systems, Networks & Digital Signal Processing (CSNDSP), 2014 9th International Symposium on*. IEEE, Conference Proceedings, pp. 146–151
- J. Alshudukhi, S. Ou, P. Ball, L. Zhao, and G. Zhao, “Energy efficiency metrics for low-power near ground level wireless sensors,” in *Wireless and Mobile Computing, Networking and Communications (WiMob), 2015 IEEE 11th International Conference on*. IEEE, Conference Proceedings, pp. 329–335
- J. Alshudukhi, S. Ou, and P. Ball, “A mac protocol for wireless sensors in a fixed chain topology,” in *Multimedia and Broadcasting (APMediaCast), 2016 Asia Pacific Conference*. IEEE, 2016
- Alshudukhi, J. S., Mohammed, B. A., & Al-Mekhlafi, Z. G. (2020). An Efficient Conditional Privacy-Preserving Authentication Scheme for the Prevention of Side-Channel Attacks in Vehicular Ad hoc Networks. IEEE Access.
- Alshudukhi, J. S., Mohammed, B. A., & Al-Mekhlafi, Z. G. (2020). Conditional Privacy-Preserving Authentication Scheme Without Using Point Multiplication Operations Based on Elliptic Curve Cryptography (ECC). IEEE Access, 8, 222032-222040..
- Alshudukhi, J. S., Al-Mekhlafi, Z. G., Alshammari, M. T., & Mohammed, B. A. (2020). Desynchronization Traveling Wave Pulse-Coupled-Oscillator Algorithm Using a Self-Organizing Scheme for Energy-Efficient Wireless Sensor Networks. IEEE Access, 8, 196223-196234.
- Alshudukhi, J. S., Al-Mekhlafi, Z. G., & Mohammed, B. A. (2021). A Lightweight Authentication with Privacy-Preserving Scheme for Vehicular Ad hoc Networks based on Elliptic Curve Cryptography. IEEE Access.
- Ramadan, R. A., Aboshosha, B. W., Alshudukhi, J. S., Alzahrani, A. J., El-Sayed, A., & Dessouky, M. M. (2021). Cybersecurity and Countermeasures at the Time of Pandemic. Journal of Advanced Transportation, 2021.
- Al-Mekhlafi, Z. G., Alshudukhi, J., & Almekhlafi, K. (2021). Comparative Study on Random Traveling Wave Pulse-Coupled Oscillator Algorithm of Energy-Efficient Wireless Sensor Networks. In Advances on Smart and Soft Computing (pp. 599-609). Springer, Singapore.
- Hamad, A.A., Thivagar, M.L., Alshudukhi, J., Alharbi, T.S., Aljaloud, S., Alhamazani, K.T. and Meraf, Z., 2021. Secure Complex Systems: A Dynamic Model in the Synchronization. Computational Intelligence and Neuroscience, 2021.
- Alhamazani, K.T., Alshudukhi, J., Alharbi, T.S., Aljaloud, S. and Meraf, Z., 2021. Using Depth Cameras for Recognition and Segmentation of Hand Gestures. Advances in Materials Science and Engineering, 2021.
- Alhamazani, K. T. Alshudukhi, J.. Aljaloud, S., Abebaw, S., Implementation of Machine Learning Models for the Prevention of Kidney Diseases (CKD) or Their Derivatives, Computational Intelligence and Neuroscience, 2021.
- Alshudukhi, J. S., (2021). Pattern-based solution for architecting cloud-enabled software. International Journal of ADVANCED AND APPLIED SCIENCES, 2021.
- Alshudukhi, J. S., (2021). BRAINSTORMING ALGORITHM FOR DRONES ROUTING PROBLEM. SCIENCE INTERNATIONAL-LAHORE, 2021.
- Qtaish, A., Alshudukhi, J. S., Mohammed, B. A., Saleh, Y., Bazrawi, S., (2021). AN IMPROVED ARABIC KEYBOARD LAYOUT. SCIENCE INTERNATIONAL-LAHORE, 2021.
- Aljaloud, S., Alshudukhi, J., Alhamazani, K. T., & Belay, A. (2022). Comparative Study of Artificial Intelligence Techniques for the Diagnosis of Chronic Nerve Diseases. Computational and Mathematical Methods in Medicine, 2022.
- Alhamazani, K. T., Alshudukhi, J., Aljaloud, S., & Abebaw, S. (2022). Hand Gesture of Recognition Pattern Analysis by Image Treatment Techniques. Computational and Mathematical Methods in Medicine, 2022.

- Alshudukhi, J., Aljaloud, S., Alharbi, T. S., & Abebaw, S. (2022). Convolutional Neural Network Architectures to Solve a Problem of Tuberculosis Classification Using X-Ray Images of the Lungs. Journal of Nanomaterials, 2022.
- Alshudukhi, J., & Yadav, K. (2022). Survivability development of wireless sensor networks using neuro fuzzy-clonal selection optimization. Theoretical Computer Science, 922, 25-36.
- Tariq, A., Awan, M. J., Alshudukhi, J., Alam, T. M., Alhamazani, K. T., & Meraf, Z. (2022). Software measurement by using artificial intelligence. Journal of Nanomaterials, 2022, 1-10.
- Yadav, K., Alshudukhi, J. S., Dhiman, G., & Viriyasitavat, W. (2022). iTSA: an improved Tunicate Swarm Algorithm for defensive resource assignment problem. Soft Computing, 26(10), 4929-4937.
- Alshudukhi, J. S. (2022). Smart and interactive healthcare system based on speech recognition using soft margin formulation and kernel trick. International Journal of System Assurance Engineering and Management, 1-10.
- Alshudukhi, J. S. (2022). Influential Incremental Learning-Based Privacy Preservation for Social Network Information. Security and Communication Networks, 2022.
- Mohammed, B. A., Al-Shareeda, M. A., Manickam, S., Al-Mekhlafi, Z. G., Alreshidi, A., Alazmi, M., ... & Alsaffar, M. (2023). FC-PA: fog computing-based pseudonym authentication scheme in 5G-enabled vehicular networks. IEEE Access, 11, 18571-18581.
- Al-Mekhlafi, Z. G., Al-Shareeda, M. A., Manickam, S., Mohammed, B. A., Alreshidi, A., Alazmi, M., ... & Alsewari, A. (2023). Chebyshev polynomial-based fog computing scheme supporting pseudonym revocation for 5G-enabled vehicular networks. Electronics, 12(4), 872.
- El-Fouly, F. H., Ramadan, R. A., Abd El-Samie, F. E., Kachout, M., Alzahrani, A. J., & Alshudukhi, J. S. (2022). Burst channel error reduction based on interleaving for efficient high-speed wireless communication. Applied Sciences, 12(7), 3500.
- Al-Gunid, H. M., Zhao, L., Alshudukhi, J., Wang, Z., Li, S., & Sedimo, A. M. (2022). Performance Analysis of Stratosphere Cellular Network Relying on Control-and User-Plane Separation. IEEE Transactions on Vehicular Technology, 71(10), 11272-11277.
- Alferaidi, A., Yadav, K., Alharbi, Y., Alshudukhi, J. S., Alreshidi, A., Alreshidi, E. J., ... & Sharif, M. H. Challenges in human centric intelligent systems for wireless sensor networks: A state of art. Transactions on Emerging Telecommunications Technologies, e4850.
- Ghaleb Al-Mekhlafi, Z., Mohammed Senan, E., Sulaiman Alshudukhi, J., & Abdulkarem Mohammed, B. (2023). Hybrid Techniques for Diagnosing Endoscopy Images for Early Detection of Gastrointestinal Disease Based on Fusion Features. International Journal of Intelligent Systems, 2023.

Patents:

- SYSTEM OF SECURE HEALTH DATA STORAGE AND TRANSACTION IN INTERCONNECTED IMPLANTED MEDICAL DEVICES AND CONTROLLING SERVER (DPMA- Deutsches Patent- und Markenamt) (G11941DE)
- SYSTEM FOR BACKLOGGING BASED ONLINE BANKING TRANSACTION FRAUD DETECTION USING BLOCKCHAIN AND ARTIFICIAL INTELLIGENCE (DPMA- Deutsches Patent- und Markenamt) (G11942DE)
- ARTIFICIAL INTELLIGENCE AND BLOCKCHAIN-BASED SYSTEM FOR MANAGING E-COMMERCE BIG DATA FOR LOGISTICS SUPPLY CHAIN (DPMA- Deutsches Patent- und Markenamt) (G11933DE)

Administrative Experience:

- Member of several academic committees at UOH (academic committee “developing and establish programs”, Quality committee, Accreditation committee , Research and Scientific committees)
- Appointed as Chairman for Information and computer Science Department.
- Appointed as Dean for Computer Science and Engineering College.