

MANSOUR M ALSULAIMAN, PhD

Professor

Computer Engineering, College of Computer & Information Sciences (CCIS)
King Saud University, Riyadh 1543, Saudi Arabia

Date of Birth: 1955

Nationality: Saudi

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Educational Background:

Dates Attending	Degrees, Professional, & Other Qualification	Names & Address Institution	Thesis or Project Title
1973 – 1977	B.Sc.	Riyadh University	“Electromagnetic Levitation”
1978 – 1980	M.Sc.	University of Wisconsin, Madison	“Effect of Shaft Torsionmal Dynamics on Induction Machine Stability at High Slip”
1980 – 1987	Ph.D.	IOWA State University Ames	“An Investigation of Storage & Communication Codes for an Electronic Library”

Major Area(s) of Specialization: Computer Engineering

Current Research:

1. Robotics and Human Interaction Technologies
2. Arabic Speaker/Speech Recognition,
3. Voice Pathology Recognition
4. Computer Assisted Error detection for Learner of Arabic Language

Employment History:

Dates (from - to)	Position, Title or Rank	Name & Address of Institution or Organization
1977- 1988	Teaching Assistant	Riyadh University
1988 - 1998	Assistant Professor	King Saud University
1998 –2014	Associate Professor	King Saud University
2014 –Now	Professor	King Saud University

Membership of Professional/Scientific Organizations:

- IEEE (Institute of Electrical and Electronics Engineers)
- ISCA (International Speech Communication Association)

Professional Duties:

- Director of Center for Smart Robotic Research 2015-Now
- College representative in KSU Scientific Council 2005 – 2009
- Member of Jouf University Scientific Council 2011 – 2014
- Member of Hafr-Albatin University Scientific Council 2019 – 2020
- Editor-in-Chief King Saud University Journal – Computer Science 2008 - 2015

- Member of the Editorial Board of King Saud University Journal – Computer part 2006 -2008
- Director of Research Center 2009 - 2012
- Chairman of the Department of Computer Engineering 1994 - 1999
- Representative of the Computer Engineering Department in the College Council 1992-1994
- Vice chairman of the College Examination Committee 1991 – 1994

Research Projects:

- Computer-Aided Pronunciation Training System for Non-native Learners of the Arabic Language (PI)
- Saudi Sign Language Translation Companion System (PI)
- A Framework for Arabic Media Mining and Information Extraction Using Continuous Domain Semantic Representation(PI)
- Deep Learning based EEG Brain Control for Hand Rehabilitation of Stroke Patients(CO-PI)
- Robotics and Artificial Intelligence(PI)
- Computing and its applications (CO-PI)

Publications

Patent

1. Mekhtiche, Mohamed Amine, Mansour Mohammed A. Alsulaiman, Hassan Ismail H. Mathkour, Mohamed Abdelkader Bencherif, Mohammed Faisal Abdulqader Naji, Mohammed Mahdi Algabri, Ghulam Muhammad et al. "Tree harvesting tool." U.S. Patent 10,485,171, issued November 26, 2019.
2. Al-Gabri, Mohammed Mahdi Ahmed, Mansour Mohammed A. Alsulaiman, Hassan Ismail H. Mathkour, Mohamed Abdelkader Bencherif, Mohammed Faisal Abdulqader Naji, Mohamed Amine Mekhtiche, Ghulam Muhammad, and Wadood Abdul. "Portable robot for two-way communication with the hearing-impaired." U.S. Patent Application 15/916,198, filed March 3 2018.

ISI Indexed Journal publications

1. Altuwaijri, G. A., Muhammad, G., Altaheri, H., & Alsulaiman, M. (2022). A Multi-Branch Convolutional Neural Network with Squeeze-and-Excitation Attention Blocks for EEG-Based Motor Imagery Signals Classification. *Diagnostics*, 12(4), 995.
2. Amin, S.U., Altaheri, H., Muhammad, G., Alsulaiman, M. and Wadood, A., 2021. Attention-Inception and Long Short-Term Memory-based Electroencephalography Classification for Motor Imagery Tasks in Rehabilitation. *IEEE Transactions on Industrial Informatics*.
3. Abdul, Wadood, Mansour Alsulaiman, Syed Umar Amin, Mohammed Faisal, Ghulam Muhammad, Fahad R. Albogamy, Mohamed A. Bencherif, and Hamid Ghaleb. "Intelligent real-time Arabic sign language classification using attention-based inception and BiLSTM." *Computers & Electrical Engineering* 95 (2021): 107395.
4. Altaheri, Hamdi, Ghulam Muhammad, Mansour Alsulaiman, Syed Umar Amin, Ghadir Ali Altuwaijri, Wadood Abdul, Mohamed A. Bencherif, and Mohammed Faisal. "Deep learning techniques for classification of electroencephalogram (EEG) motor imagery (MI) signals: a review." *Neural Computing and Applications* (2021): 1-42.
5. Muhammad, Ghulam, Fatima Alshehri, Fakhri Karray, Abdulmotaleb El Saddik, Mansour Alsulaiman, and Tiago H. Falk. "A comprehensive survey on multimodal medical signals fusion for smart healthcare systems." *Information Fusion* (2021).
6. Elgibreen, H., Faisal, M., Al Sulaiman, M., Abdou, S., Mekhtiche, M.A., Moussa, A.M., Alohal, Y.A., Abdul, W., Muhammad, G., Rashwan, M. and Algabri, M., 2021. An incremental approach to corpus design and construction: application to a large contemporary saudi corpus. *IEEE Access*, 9, pp.88405-88428..

7. Faisal, M., Albogamy, F., ElGibreen, H., Algabri, M., Alvi, S.A.M. and Alsulaiman, M., 2021. COVID-19 Diagnosis Using Transfer-Learning Techniques. *Intelligent Automation and Soft Computing*, pp.649-667..
8. Musallam, Yazeed K., Nasser I. AlFassam, Ghulam Muhammad, Syed Umar Amin, Mansour Alsulaiman, Wadood Abdul, Hamdi Altaheri, Mohamed A. Bencherif, and Mohammed Algabri. "Electroencephalography-based motor imagery classification using temporal convolutional network fusion." *Biomedical Signal Processing and Control* 69 (2021): 102826.
9. Bencherif, Mohamed A., Mohammed Algabri, Mohamed A. Mekhtiche, Mohammed Faisal, Mansour Alsulaiman, Hassan Mathkour, Muneer Al-Hammadi, and Hamid Ghaleb. "Arabic Sign Language Recognition System Using 2D Hands and Body Skeleton Data." *IEEE Access* 9 (2021): 59612-59627.
10. Nafea, Ohoud, Wadood Abdul, Ghulam Muhammad, and Mansour Alsulaiman. "Sensor-Based Human Activity Recognition with Spatio-Temporal Deep Learning." *Sensors* 21, no. 6 (2021): 2141.
11. Algabri, Mohammed, Hassan Mathkour, Mansour M. Alsulaiman, and Mohamed A. Bencherif. "Deep Learning-Based Detection of Articulatory Features in Arabic and English Speech." *Sensors* 21, no. 4 (2021): 1205.
12. Al-Hammadi, Muneer, Ghulam Muhammad, Wadood Abdul, Mansour Alsulaiman, Mohammed A. Bencherif, Tareq S. Alrayes, Hassan Mathkour, and Mohamed Amine Mekhtiche. "Deep Learning-Based Approach for Sign Language Gesture Recognition With Efficient Hand Gesture Representation." *IEEE Access* 8 (2020): 192527-192542.
13. Faisal, Mohammed, Mansour Alsulaiman, Mohammed Arafah, and Mohamed Amine Mekhtiche. "IHDS: Intelligent Harvesting Decision System for Date Fruit Based on Maturity Stage Using Deep Learning and Computer Vision." *IEEE Access* 8 (2020): 167985-167997.
14. Al-Hammadi, Muneer, Ghulam Muhammad, Wadood Abdul, Mansour Alsulaiman, Mohamed A. Bencherif, and Mohamed Amine Mekhtiche. "Hand Gesture Recognition for Sign Language Using 3DCNN." *IEEE Access* 8 (2020): 79491-79509.
15. Algabri, Mohammed, Hassan Mathkour, Mohamed Abdelkader Bencherif, Mansour Alsulaiman, and Mohamed Amine Mekhtiche. "Towards Deep Object Detection Techniques for Phoneme Recognition." *IEEE Access* 8 (2020): 54663-54680.
16. Amin, S. U., Alsulaiman, M., Muhammad, G., Mekhtiche, M. A., & Hossain, M. S. (2019). Deep Learning for EEG motor imagery classification based on multi-layer CNNs feature fusion. *Future Generation Computer Systems*, 101, 542-554.
17. Altaheri, H., Alsulaiman, M., Muhammad, G., Amin, S. U., Bencherif, M., & Mekhtiche, M. (2019). Date fruit dataset for intelligent harvesting. *Data in brief*, 26, 104514.
18. Mahmood, A., Muhammad, G., Alsulaiman, M., Dhahri, H., Othman, E. M. A., & Faisal, M. (2019). Moving average multi directional local features for speaker recognition. *Cluster Computing*, 22(1), 2145-2157.
19. Altaheri, H., Alsulaiman, M., & Muhammad, G. (2019). Date fruit classification for robotic harvesting in a natural environment using deep learning. *IEEE Access*, 7, 117115-117133.
20. Syed Umar Amin, Mansour Alsulaiman, Ghulam Muhammad, M. A. Bencherif and M. Shamim Hossain, "Multilevel Weighted Feature Fusion Using Convolutional Neural Networks for EEG Motor Imagery Classification," *IEEE Access*, vol. 7, no. 1, pp. 18940-18950, December 2019. DOI: 10.1109/ACCESS.2019.2895688.
21. M. Shamim Hossain, Syed Umar Amin, Mansour Alsulaiman, and Ghulam Muhammad, "Applying Deep Learning to Epilepsy Seizure Detection and Brain Mapping," *ACM Transactions on Multimedia Computing Communications and Applications*, 2019.
22. Muneer Al-Hammadi, Ghulam Muhammad, Wadood Abdul, Mansour Alsulaiman, and M. Shamim Hossain, "Hand Gesture Recognition Using 3D-CNN Model," *IEEE Consumer Electronics Magazine*, 2019.
23. Muhammad, Ghulam, Mohammed F. Alhamid, Mansour Alsulaiman, and Brij Gupta. "Edge Computing with Cloud for Voice Disorder Assessment and Treatment." *IEEE Communications Magazine* 56, no. 4 (2018): 60-65.
24. Ali, Zulfiqar, Muhammad Imran, Mansour Alsulaiman, Muhammad Shoab, and Sana Ullah. "Chaos-based robust method of zero-watermarking for medical signals." *Future Generation Computer Systems* (2018).
25. Faisal M, Mathkour H, Alsulaiman M. I3MS: Intelligent Multi-Sensor Multi-Baseline Mapping System. *IEEE Access*. 2018 Jan 1.

26. Ali Z, Imran M, Alsulaiman M, Zia T, Shoaib M. A zero-watermarking algorithm for privacy protection in biomedical signals. *Future Generation Computer Systems*. Volume 82, 2017 Dec 19, pp. 290-303.
27. Tamer A. Mesallam, Mohamed Farahat, Khalid H. Malki, et al., "Development of the Arabic Voice Pathology Database and Its Evaluation by Using Speech Features and Machine Learning Algorithms," *Journal of Healthcare Engineering*, vol. 2017, Article ID 8783751, 13 pages, 2017.
28. Wadood Abdul; Zulfiqar Ali; Sanaa Ghounzali; Mansour Alsulaiman, "Security and Privacy for Medical Images Using Chaotic Visual Cryptography", *Journal of Medical Imaging and Health Informatic*, Issue 6, Volume 7, 2017, pp. 1296-1301.
29. Ghulam Muhammad, Mansour Alsulaiman, Syed Umar Amin, Ahmed Ghoneim, and Mohammed F. Alhamid, "A Facial-Expression Monitoring System for Improved Healthcare in Smart Cities," *IEEE Access*, vol. 5, no. 1, pp. 10871-10881, December 2017. DOI: 10.1109/ACCESS.2017.2712788.
30. Zulfiqar Ali, Mansour Alsulaiman, Ghulam Muhammad, Irraivan Elamvazuthi, Ahmed Al-nasheri, Tamer A. Mesallam, Mohamed Farahat, and Khalid H. Malki, "Intra- and Inter-Database Study for Arabic, English, and German Databases: Do Conventional Speech Features Detect Voice Pathology?," *Journal of Voice*, 2016. DOI: 10.1016/j.jvoice.2016.09.009.
31. Mohammed Algabri, Hassan Mathkour, Mohamed Amine Mekhtiche, Mohamed Abdelkader Bencherif, Mansour Alsulaiman, Mohammed Amer Arafah, Hamid Ghaleb, Wireless vision-based fuzzy controllers for moving object tracking using a quadcopter, *International Journal of Distributed Sensor Networks*, (2017) Vol 13, Issue 4.
32. Ahmed Al-nasheri, Ghulam Muhammad, Mansour Alsulaiman, Zulfiqar Ali, Khalid H. Malki, Tamer A. Mesallam, and Mohamed Farahat, "Voice Pathology Detection and Classification using Auto-correlation and entropy features in Different Frequency Regions", *IEEE Access*, 2017. DOI: 10.1109/ACCESS.2017.2696056.
33. Zulfiqar Ali, Muhammad Talha and Mansour Alsulaiman, "A Practical Approach: Design and Implementation of a Healthcare Software for Screening of Dysphonic Patients", *IEEE Access*, vol. 5, pp. 5844 - 5857, 2017.
34. Mohammed Algabri, Hassan Mathkour, Mohamed Bencherif, and Mansour Alsulaiman. "Automatic Speaker-Recognition for Mobile Forensic Applications." *Mobile Information Systems*, Volume 2017 (2017), Article ID 6986391.
35. Zulfiqar Ali, Muhammad Imran, and Mansour Alsulaiman, "An Automatic Digital Audio Authentication/Forensics System", *IEEE Access*, vol. 5, no. 1, pp. 2994–3007, 2017.
36. Mansour Alsulaiman, Awais Mahmood, Ghulam Muhammad, "Speaker recognition based on Arabic phonemes," *Speech Communication*, vol. 86, pp. 42-51, February 2017. DOI: 10.1016/j.specom.2016.11.004.
37. Ghulam Muhammad; Mansour Alsulaiman; Zulfiqar Ali; Tamer A. Mesallam; Mohamed Farahat; Khalid H. Malki; Ahmed Al-nasheri; Mohamed A. Bencherif, "Voice Pathology Detection using Interlaced Derivative Pattern on Glottal Source Excitation," *Biomedical Signal Processing and Control*, Volume 31, 2017, pp. 156–164.
38. Ahmed Al-nasheri; Ghulam Muhammad; Mansour Alsulaiman; Zulfiqar Ali; Tamer A. Mesallam; Mohamed Farahat; Khalid H. Malki; Mohamed A. Bencherif, "An Investigation of Multidimensional Voice Program Parameters in Three Different Databases for Voice Pathology Detection and Classification", *Journal of Voice*, Issue 1, Volume 31, 2017, pp. 113.e9–113.e18.
39. Mohammed Algabri, Mohamed Bencherif, Mansour Alsulaiman, Ghulam Muhammad, and Mohamed Amine Mekhtiche. "Soft Computing Techniques for Classification of Voiced/Unvoiced Phonemes." *Intelligent Automation & Soft Computing* (2017) .
40. Ahmed Al-nasheri; Ghulam Muhammad; Mansour Alsulaiman; Zulfiqar Ali, "Investigation of Voice Pathology Detection and Classification on Different Frequency Regions Using Correlation Functions", *Journal of Voice*, Issue 1, Volume 31, 2017, pp. 3-15.
41. Mohammed Faisal, Mansour Alsulaiman, Ramdane Hedjar, Hassan Mathkour, Mansour Zuair, Hamdi Altaheri, Mohammed Zakariah, M. A. Bencherif, and M. A. Mekhtiche, " Enhancement of Mobile Robot Localization Using Extended Kalman Filter," *Advances in Mechanical Engineering*, vol. 8(11), pp. 1-11, 2016.
42. M. Faisal, H. Mathkour, M. Alsulaiman, and M. Zuair, "Multi-sensors multi-baseline mapping system for mobile robot using stereovision camera and laser-range device," *Advances in Mechanical Engineering*, vol. 8(6), pp. 1-18, 2016.
43. Mohammed Faisal, Hassan Mathkour, and Mansour Alsulaiman, "AntStar: Enhancing Optimization Problems by Integrating an Ant System and Algorithm," *Scientific Programming*, vol. 2016, Article ID 5136327, 12 pages, 2016. doi:10.1155/2016/5136327.

44. Khalid Al-Muteb, Mohammed Faisal, Mansour Alsulaiman, Muhammad Emaduddin, Ramdane Hedjar, Hassan Mathkour, Mohammed Algabri, Mohamed Mekhtiche, and M. A. Bencherif, "An Autonomous Stereovision-based Navigation System (ASNS) for Mobile Robots," *Intelligent Service Robotics*, Vol. 9, no. 3, pp. 187–205, 2016
45. Ghulam Muhammad, Ghadir Altuwaijri, Mansour Alsulaiman, Zulfiqar Ali, Tamer A. Mesallam, Mohamed Farahat, Khalid H. Malki, Ahmed Al-nasheri, "Automatic Voice Pathology Detection and Classification using Vocal Tract Area Irregularity", *Biocybernetics and Biomedical Engineering*, vol. 6, no. 2, pp. 309-317, 2016.
46. Zulfiqar Ali, Irraivan Elamvazuthi, Mansour Alsulaiman, Ghulam Muhammad, "Detection of Voice Pathology using Fractal Dimension in a Multiresolution Analysis of Normal and Disordered Speech Signals", *Journal of Medical Systems*, vol. 40, no. 1, p. 20, 2016.
47. Zulfiqar Ali, Irraivan Elamvazuthi, Mansour Alsulaiman, Ghulam Muhammad, "Automatic Voice Pathology Detection with Running Speech by Using Estimation of Auditory Spectrum and Cepstral Coefficients Based on the All-Pole Model", *Journal of Voice*, vol. 30, no. 6 , pp. 757.e7-757.e19, 2016.
48. Zulfiqar Ali, Mansour Alsulaiman, Irraivan Elamvazuthi, Ghulam Muhammad, Tamer A. Mesallam, Mohamed Farahat, Khalid H. Malki, "Voice Pathology Detection based on the Modified Voice Contour and SVM", *Biologically Inspired Cognitive Architectures (BICA)*, vol. 15, pp. 10-18, 2016.
49. Mohammed Algabri, Hassan Mathkour, Hedjar Ramdane, and Mansour Alsulaiman, "Comparative Study of Soft Computing Techniques for Mobile Robot Navigation in an Unknown Environment ", *Computers in Human Behavior*, Volume 50, September 2015, Pages 42-56, ISSN 0747-5632.
50. K. Al-Mutib, F. Abdessemed, R. Hedjar, M. Alsulaiman, M.Bencherif, M. Faisal, M.Algabri, and M.Mekhtiche, "Mobile Robot Nonlinear Feedback Control Based on Elman Neural Network Observer", *Advances in Mechanical Engineering*, December 2015; vol. 7, 12.
51. M. Mekhtiche, Z. Benselama, M. Bencherif, M. Zakariah, Mansour Alsulaiman, R. Hedjar, M. Faisal, M. Algabri, and Khalid AlMuteb, "Visual Tracking in Unknown Environments Using Fuzzy Logic and Dead Reckoning," *International Journal of Advanced Robotic Systems*, vol. 13, no. 2, 2016.
52. Awais Mahmood, Mansour Alsulaiman, Ghulam Muhammad, Sheeraz Akram, "Artificially Intelligent Recognition of Arabic Speaker using Voice Print Based Local Features", *Journal of Experimental & Theoretical Artificial Intelligence*, vol. 28, no. 6, 2016.
53. Al Mutib, K., Mattar, E., & Alsulaiman, M. (2015, January). Implementation of Fuzzy Decision Based Mobile Robot Navigation Using Stereo Vision. In SCSE (pp. 143-150).
54. Mohammed Algabri, Hassan Mathkour, Hedjar Ramdane, Mansour Alsulaiman, Khalid Al-Mutib, "Self-learning Mobile Robot Navigation in Unknown Environment Using Evolutionary Learning", *Journal Of Universal Computer Science*, vol. 20, no. 10, pp. 1459-1468, 2014.
55. Foudil abdessemed, Mohammed Faisal, Muhammed Emaduddin, Ramdane Hedjar, Khalid Al-Mutib, Mansour Alsulaiman and Hassan Mathkour, "A Hierarchical Fuzzy Control Design for Indoor Mobile Robot," in *International Journal of Advanced Robotic Systems*, vol. 11, no.33, 2014.
56. Mansour Alsulaiman, "Voice Pathology Assessment Systems for Dysphonic Patients: Detection, Classification, and Speech Recognition", *IETE Journal of Research*, vol. 60, no. 2, pp. 156-167, 2014.
57. Awais Mahmood, Mansour Alsulaiman, and Ghulam Muhammad, "Automatic Speaker Recognition using Multi Directional Local Features (MDLF)", *Arabian Journal of Science and Technology*, vol. 39, pp. 3799-3811, 2014.
58. Mutib, M. Emaduddin, M. Alsulaiman, H. Ramdane, & E. Mattar, "Motion Periodicity based Pedestrian Detection and Particle Filter based Pedestrian Tracking using Stereo Vision Camera," *International Journal of Computer Applications in Technology*, Inderscience, vol. 50, no. 1-2, pp. 113-121, 2014.
59. Mohammed Algabri, Hedjar Ramdane, Hassan Mathkour, Khalid AlMutib, and Mansour Alsulaiman, "Optimization of Fuzzy Logic Controller using PSO for Mobile Robot Navigation in an Unknown Environment", 2014, *Applied Mechanics and Materials*, 541-542, 1053.
60. Mansour Alsulaiman, Ghulam Muhammad, Mohamed A. Bencherif, Awais Mahmood, Zulfiqar Ali, " KSU Rich Arabic Speech Database", *Journal of Information*, vol. 16, no. 6(B), 2013.
61. M. Faisal, R. Hedjar, M. Alsulaiman and K. Mutib, "Fuzzy Logic Navigation and Obstacle Avoidance of Mobile Robot in Unknown Dynamic Environment" , *International Journal of Advanced Robotic Systems*, vol. 10, no. 37, 2013.

62. Ghulam Muhammad, Tamer Mesallam, Khalid Almalki, Mohamed Farahat, Awais Mahmood, and Mansour Alsulaiman, "Multi Directional Regression (MDR) Based Features for Automatic Voice Disorder Detection," *Journal of Voice*, Elsevier, vol. 26, no. 6, pp. 817.e19-e27, 2012.
63. Muhammad, G.; AlMalki, K.; Mesallam, T.; Farahat, M.; Alsulaiman, M. and Bukhari, M. "Formant analysis in dysphonic patients and automatic Arabic digit speech recognition", *BioMedical Engineering Online*, Vol. 10, No. 41, pp. 1-12, 2011.

Book Chapter

1. Amin, Syed Umar, Mansour Alsulaiman, Ghulam Muhammad, M. Shamim Hossain, and Mohsen Guizani. "Deep Learning for EEG Motor Imagery-Based Cognitive Healthcare." In *Connected Health in Smart Cities*, pp. 233-254. Springer, Cham, 2020.
2. Syed Umar Amin, Mansour Alsulaiman, Ghulam Muhammad, and M. Shamim Hossain, "Deep Learning for EEG based Cognitive Healthcare," in *Connected Health in Smart Cities*", A. El Saddik Ed., Springer Nature Switzerland AG, May 2019.

Refreed Journal publications

1. Mattar, Ebrahim, Khalid Al Mutib, Mansour Al Sulaiman, and Hajar Ramdane. "Mobile Robot Intelligence Based SLAM Features Learning and Navigation." *Int. J. Com. Dig. Sys* 7, no. 1 (2018).
2. Zulfiqar Ali, Ghulam Muhammad, Mansour Alsulaiman, Irraivan Elamvazuthi and Khalid Al-Mutib, "Oriented and Interpolated Local Features for Speech Recognition of Vocal Fold Disordered Patients", *International Journal of Computers and Their Applications*, vol. 22, no. 1, 2015.
3. Mansour Alsulaiman, "Automatic Enlargement Of Speech Corpus by using Different Techniques", *Journal of Theoretical and Applied Information Technology*, vol. 62, no. 2, pp. 445-457, 2014.
4. Ramdane, H., Faisa, M., Algabri, M., & Al-Mutib, K. (2013). Mobile Robot Navigation with Obstacle Avoidance in Unknown Indoor Environment using MATLAB. *International Journal of Computer Science and Network*, 2(6), 25-31.
5. Ebrahim Abdulla Mattar, K. Al Mutib, M. Alsulaiman, H. Ramdane, Muhammad Emaduddin, "Neural Network Vision-Based Visual Servoing And Navigation for KSU-IMR Mobile Robot Using Epipolar Geometry," *International Journal of Soft Computing and Software Engineering*, vol. 3, no. 3, pp. 892-899, 2013.
6. Mansour Alsulaiman, "A technique to overcome the problem of small size database for automatic speaker recognition", *International Journal of Physical Sciences*, vol. 7, no. 13, pp. 2076 - 2084, 2012.
7. K. AlMutib, M. AlSulaiman, M. Emaduddin, and H. Ramdane, "D* Lite Based Real-Time Multi-Agent Path Planning in Dynamic Environments," *International Journal of Engineering Research and Applications*, vol. 2, no. 2, pp.1414-1419, 2012.
8. Mansour Alsulaiman, Youssef Alotaibi, Muhammad Ghulam, Mohamed A. Bencherif and Awais Mahmood, "Arabic Speaker Recognition: Babylon Levantine Subset Case Study", *Journal of Computer Science*, vol. 6, no. 4, pp. 381-385, 2010.

Conferences publications

1. Amin, Syed Umar, Hamdi Altaheri, Ghulam Muhammad, Mansour Alsulaiman, and Wadood Abdul. "Attention based Inception model for robust EEG motor imagery classification." In *2021 IEEE international instrumentation and measurement technology conference (I2MTC)*, pp. 1-6. IEEE, 2021.
2. Amin, Syed Umar, Ghulam Muhammad, Wadood Abdul, Mohamed Bencherif, and Mansour Alsulaiman. "Multi-CNN Feature Fusion for Efficient EEG Classification." In *2020 IEEE International Conference on Multimedia & Expo Workshops (ICMEW)*, pp. 1-6. IEEE, 2020.

3. Zulfiqar Ali, Mansour Alsulaiman, Ghulam Muhammad, Ahmed Al-nasheri, Awais Mahmood, "Clinical Informatics: Mining of Pathological Data by Acoustic Analysis", International Conference on Informatics, Health & Technology, 21-23 Feb, 2017.
4. Mattar, E., AlMutib, K., AlSulaiman, M., & Ramdane, H. (2017, May). Mobile Robot Neuro-Fuzzy Navigation Based VSLAM Features Learning. In 2017 9th IEEE-GCC Conference and Exhibition (GCCCE) (pp. 1-6). IEEE.
5. K. Al-Mutib, F. Abdessemed, M. Faisal, R. Hedjar, M. Alsulaiman, M. Bencherif, "Obstacle Avoidance Using Wall-Following Strategy for Indoor Mobile," Robots IEEE-ROMA2016
6. Mohammed Faisal, Hassan Mathkour, AND Mansour Alsulaima "Accurate Real-Time Mapping System for Mobile Robot in an Unstructured Unknown Environment," The Fourth Arab Conference of Robotics and Artificial Intelligence, Qatar, 2016.
7. Mohammed Algabri, Ghulam Muhammad, Mohamed Bencherif, Mansour Alsulaiman, "ROASL – Robot for Arabic Sign Language", Fourth Arab robotics and Artificial Intelligence Conference "Towards Technological Excellence - Qatar, 14-16/2/2016.
8. Faisal Alomran, Abdullah Bin Julayyil, Mohammed Faisal, and Mansour Alsulaima "Toward an Accurate and Autonomous Gas Detection and Mapping System Using Mobile Robot," The Fourth Arab Conference of Robotics and Artificial Intelligence, Qatar, 2016
9. Ahmed Al-nasheri, Zulfiqar Ali, Ghulam Muhammad, Mansour Alsulaiman, "An Investigation of MDVP Parameters for Voice Pathology Detection on Three Different Databases", Proc. of INTERSPEECH, Sep 6-10, 2015.
10. Mohammed Faisal, Mansour Alsulaiman, Khalid Al-Muteb, Ramdane Hedjar, Hassan Mathkour, and Muhammad Emaduddin, "Gas Detection and Mapping Using an Autonomous Mobile Robot," International Conference on Computer Applications in Industry and Engineering (CAINE-2015)
11. Mohammed Algabri, Mansour Alsulaiman, Ghulam Muhammad, Tamer A Mesallam, Khalid H Malki, Mohamed Farahat "Automatic Speech Recognition of Pathological Voice", the 2 nd International Conference on Soft Computing and Computational Mathematics, At Langkawi, Malaysia, December 10-11, 2015.
12. Mekhtiche M., Bencherif M.A., Algabri M., Alsulaiman M., Hedjar R., Faisal M., AlMutib K. "Real Time Object Detection & Tracking Over a Mobile Platform", the 2 nd International Conference on Soft Computing and Computational Mathematics, At Langkawi, Malaysia, December 10-11, 2015.
13. Mohammed Algabri, Mansour Alsulaiman, Ghulam Muhammad, Mohammed Zakariah, Mohamed Bencherif, Zulfiqar Ali, "Voice and Unvoiced Classification Using Fuzzy Logic", The 2015 World Congress in Computer Science, Computer Engineering, and Applied Computing, At Las Vegas, Nevada, USA, Int'l Conf. IP, Comp. Vision, and Pattern Recognition | IPCV'15 |, July 27-30, 2015.
14. Mohamed A. Mekhtiche, Mohamed A. Bencherif, Mansour Alsulaiman, Ramdane Hedjar, Khaled Muteb, Mohamed Faissal, Mohamed Algabri, "Real Time Depth and Size Computation", 30th International Conference on Computers and Their Applications (CATA-2015), March 9-11, 2015, Honolulu, Hawaii, USA
15. M. Faisal, Hassan Mathkour, Mansour Alsulaiman, "Smart Mobile Robot for Security of Low Visibility Environment," The 5th IEEE National Symposium on Information Technology: Towards New Smart World, 17-19 Feb 2015, Riyadh, Saudi Arabia.
16. Ahmed Al-nasheri, Zulfiqar Ali, Ghulam Muhammad, Mansour Alsulaiman, Khalid H. Almalki, Tamer A. Mesallam, Mohamed Farahat, "Voice Pathology Detection with MDVP Parameters Using Arabic Voice Pathology Database", The 5th IEEE National Symposium on Information Technology: Towards New Smart World, Feb 16-18, 2015.
17. Ghulam Muhammad, Mansour Alsulaiman, Awais Mahmood, Malak Almojaly, and M.A. Bencherif, "Voice Pathology Detection using Multiresolution Technique," 8th European Modelling Symposium (EMS2014), Pisa, Italy, October 21-23, 2014.
18. Al-Mutib, K. N., Mattar, E. A., Alsulaiman, M. M., & Ramdane, H. (2014, December). Stereo vision SLAM based indoor autonomous mobile robot navigation. In 2014 IEEE International Conference on Robotics and Biomimetics (ROBIO 2014) (pp. 1584-1589). IEEE.
19. M Faisal, R Hedjar, M Alsulaiman, K Al-Mutabe " Robot localization using extended kalman filter with infrared sensor ", Computer Systems and Applications (AICCSA), 2014
20. Faisal, Mohammed, et al. "Behavior based Mobile for Mobile Robots Navigation and Obstacle Avoidance."

21. Mohammed Algabri, Hedjar Ramdane, Hassan Mathkour, Khalid AlMutib, and Mansour Alsulaiman, "Optimization of Fuzzy Logic Controller using PSO for Mobile Robot Navigation in an Unknown Environment", Proceedings of the 2014 International Conference on on Mechanical, Electronics and Computer Engineering (CMECE 2014)24-26, Jan.2014,Sanya,china.
22. Malak Almojaly, Ghulam Muhammad, and Mansour Alsulaiman, "Detection and Classification of Voice Pathology Using Feature Selection," 11th ACS/IEEE International Conference on Computer Systems and Applications, Doha, Qatar, November 10-13, 2014.
23. Afnan Alhindi, Mansour Alsulaiman, Ghulam Muhammad and Saad Al-Kahtani, "Automatic Pronunciation Error Detection of Nonnative Arabic Speech," 11th ACS/IEEE International Conference on Computer Systems and Applications, Doha, Qatar, November 10-13, 2014.
24. Ahmed Al-Nasheri, Zulfiqar Ali, Ghulam Muhammad, and Mansour Alsulaiman, "Voice Pathology Detection Using Auto-Correlation of Different Filters Bank," 11th ACS/IEEE International Conference on Computer Systems and Applications, Doha, Qatar, November 10-13, 2014.
25. Zulfiqar Ali, Ghulam Muhammad, Mansour Alsulaiman, Irraivan Elamvazuthi and Khalid Al-Mutib, "Automatic Speech Recognition for Dysphonic Patients by using Oriented Local Features," 27th International Conference on Computer Applications in Industry and Engineering, New Orleans, Louisiana, USA, October 13-15, 2014.
26. Mansour Alsulaiman, Hussein Obeidat, Saad Al-Kahtani, Zulfiqar Ali, Ghulam Muhammad, Afnan Al Hindi, Taha Alfakih, "Pronunciation Errors of Non-Arab Learners of Arabic Language", Int. Conf. on Computer, Communication and Control, Technology, pp. 270-275, Sep. 2014.
27. Khalid Almutib, Muhammad Emaduddin, Mansour Alsulaiman, Hedjar Ramdane and Ebrahim Mattar, "Reliable Multi-baseline Stereovision filter for Navigation in Unknown Indoor Environments" International Conference on Bioinformatics and Computational Biology (BICoB) March, 2014, Las Vegas, Nevada, USA
28. Khalid Almutib, Muhammad Emaduddin, Mansour Alsulaiman, Hedjar Ramdane and Ebrahim Mattar, "KSU-IMR Robotic System Control: Efforts Toward Integration of Artificial Vision with Artificial Intelligence," International Conference On Power, Control, Signals And Computation. January, Jan 2014, India.
29. Ghulam Muhammad, Zulfiqar Ali, Mansour Alsulaiman, Khalid Almutib, "Vocal Fold Disorder Detection by applying LBP Operator on Dysphonic Speech Signal", 2nd International Conference on Intelligent Control, Modelling and Systems Engineering, 29-31 Jan., 2014.
30. Alsulaiman M., "Effect of Spoken Text on Text-independent Speaker Recognition", 5th International conference on Intelligent Systems, Modelling and Simulation, 27-29 Jan., 2014. Available at <http://ijssst.info/Vol-15/No-3/data/3857a279.pdf>
31. M. Algabri, K. Al-Mutib, M. Alsulaiman, H. Ramdane, M. Emaduddin & E. Mattar, "Mobile Robot Navigation and Obstacle-avoidance Using Neuro-fuzzy System in Unknown Environment,"CAINE 2013, 26th International Conference on Computer Applications in Industry and Engineering, September 25–27, 2013, California, USA
32. Alsulaiman M., Ali Z., Muhammad G., Bencherif M. A., Mahmood A., "KSU Speech Database: Text Selection, Recording and Verification", Proceeding of 7th European Modelling Symposium on Mathematical Modelling and Computer Simulation, 20-22 Nov., 2013.
33. Ali Z., Alsulaiman M., Muhammad G., Mesallam T. A., Irraivan E., "Vocal Fold Disorder Detection based on Continuous Speech by using MFCC and GMM", Proceedin of 7th IEEE GCC Conference and Exhibiton, pp. 384-289, 17-20 Nov. 2013.
34. Awais Mahmood, Mansour Alsulaiman, Ghulam Muhammad and Sid M. Selouani, "MDLF-Mavg: A New Speech Feature with a Voice Print", Proceeding of 7th IEEE GCC Conference and Exhibiton, pp. 602-606, 17-20 Nov., 2013
35. Mansour M. Alsulaiman, Ghulam Muhammad, Zulfiqar Ali, "Classification of Vocal Fold Diseases Using RASTA-PLP", Proceeding of the 2013 International Conference on Bioinformatics and Computational Biology, (BIOCOMP'13), 22-25 Jul., 2013.
36. Mohammed Faisal, Khalid Al-Mutib and Hassan Mathkour , "A Fuzzy Logic based Investigation of the Success and Failure of Project Management", 6th World Summit on the Knowledge Society (WSKS 2013), 19-21 June 2013, Aveiro, Portugal.
37. Faisal, M., Al-Mutib, K., Hedjar, R., Mathkour, H., Alsulaiman, M. and Mattar, E., 2013. Multi modules fuzzy logic

for mobile robots navigation and obstacle avoidance in unknown indoor dynamic environment. In Proceedings of the 2013 International Conference on Systems, Control and Informatics (pp. 371-379)..

38. K. Al-Mutib, M. Emaduddin, M. Alsulaiman, R. Hedjar, and E. Mattar, "Motion Periodicity based Pedestrian Detection and Particle Filter based Pedestrian Tracking using Stereo Vision Camera," Proceeding of the 19th International Conference on Mechatronics and Machine Vision in Practice, Auckland, New Zealand, 2012.
39. Mansour Alsulaiman, Zulfiqar Ali and Ghulam Muhammad, "Voice Intensity Based Gender Classification By Using Simpson's Rule With SVM", Proceeding of the IEEE 19th International Conference on Systems, Signals and Image Processing, IWSSIP, pp. 552-555, April 11-14, 2012 , Vienna, Austria, 2012.
40. M. Emaduddin, K. AlMutib, M. AlSulaiman, R. Hedjar, and E. Mattar, "Accurate Floor Detection and Segmentation for Indoor Navigation using RGB+D and Stereo Cameras," Proceedings of the 2010 International Conference on Image Processing, Computer Vision, & Pattern Recognition, Las Vegas, Nevada, USA, 2012.
41. Al Mutib, K.; Al Sulaiman, M.; Ramdane, H.; Emaduddin, M.M.; Mattar, E.A.; , "Active Stereo Vision for Mobile Robot Localization and Mapping Path Planning," Proceeding of the Computer Modelling and Simulation (UKSim), 2012 UKSim 14th International Conference on , vol., no., pp.293-299, 28-30 March 2012
42. K. Al-Mutib, E. A. Mattar, M. Al Sulaiman, H. Ramdane, & M. Emaduddin, "Neural Net Robotics Visual Servo: Learning the Epipolar Geometry," Proceedings of the International Conference on Artificial Intelligence, LAS Vegas, Nevada, July 16-19. ICAI'12 , 2012, USA.
43. Mohamed Bencherif, Mansour Alsulaiman, Ghulam Muhammad, Ghassan H. Al Shatter, Saad A. Al-Kahtani, Zulfiqar Ali and Mohammed Al-Gabri, "Automatic Identification of Arabic L2 Learners Origin", Proceeding of the International Symposium on Automatic Detection of Errors in Pronouncing Training", IS ADEPT 2012, pp. 107-112, June 6-8, Stockholm, Sweden.
44. Mohamed A. Bencherif, Mansour Alsulaiman, Ghulam Muhammad, Zulfiqar Ali, Awais Mahmood," Gender Effect in Trait Recognition", Proceeding of the International conference on signal processing and image engineering 2012, San Francisco, USA
45. Awais Mahmood, Mansour Alsulaiman, and Ghulam Muhammad," Multidirectional Local Features for Speaker Recognition", Proceeding of ISMS 2012, February 2012, Kota Kinabalu, Malaysia
46. Alsulaiman, M. "Automatic Enlargement of Speech Corpus for Speaker Recognition", Proceedings of IEEE Symposium on Computers and Informatics, pp. 302-306, 2011.
47. Alsulaiman, M. "Speech Recognition for Medically Disordered Voice", Proceedings of 24th International Conference on Computers and their Applications in Industry and Engineering, CAINE, pp. 233-237, 2011
48. Alsulaiman, M.; Ali, Z. and Muhammad, G., "Gender Classification with Voice Intensity", Proceedings of IEEE UKSim 5th European Symposium on Computer Modeling and Simulation, pp. 205-209, 2011.
49. Alsulaiman, M.; Muhammad, G. and Ali, Z. "Comparison of Voice Features for Arabic Speech Recognition", Proceedings of the 6th IEEE International Conference on Digital Information Management, ICDIM 2011, pp. 90-95, 2011.
50. Muhammad, G.; AlMalki, K.; Mesallam, T.; Farahat, M. and Alsulaiman, M., "Automatic Arabic Digit Speech Recognition and Formant Analysis for Voicing Disordered People", Proceedings of IEEE Symposium on Computers and Informatics, pp. 669-702, 2011.
51. Awais Mahmood, Mansour M. Alsulaiman, Ghulam Muhammad, and Mohamed A. Bencherif, " Verification of A Rich Arabic Speech Database" Proceeding of COCOSDA 2011, October, Taiwan.
52. Mansour M. Alsulaiman, Ghulam Muhammad, Mohamed A. Bencherif, Awais Mahmood, Zulfiqar Ali, and Mohammad Aljabri, "Building a Rich Arabic Speech Database", Proceeding of the Fifth Asia International Conference on Mathematical Modeling and Computer Simulation (AMS '11), pp. 100-106, May 23, Malaysia.

53. Ghulam Muhammad, Mansour M. Alsulaiman, Zulfiqar Ali and Awais Mahmood, "Automatic Voice Disorder Classification using Vowel Formants", Proceeding of the 2011 IEEE International Conference on Multimedia and Expo (ICME 2011), July 11-15, 2011, Barcelona.
54. Mansour Alsulaiman, Ghulam Muhammad, Mohammed A. Alomari, Mohammed A. Alshehri, Zulfiqar Ali and Awais Mahmood, "An Automatic Diagnostic System for Medically Disordered Voice", Proceeding of the 2011 (IPCV'11), PP. 213-218, July 18-21, 2011, USA.
55. Al-Mutib, K.; Alsulaiman, M.; Emaduddin, M. and Ramdane, H., "D* Lite based Real-Time Multi-Agent Path Planning in Dynamic Environments", Proceedings of 3rd International Conference Computational Intelligence, Modeling and Simulation (CIMSIM), 2011, 170-174.
56. Al Mutib, K.; Alsulaiman M.; Mathkour H.; Mattar, E. A. and Ramdane, H., "(KSU-IMR) An Intelligent Mobile Robotics System: Active Stereo Vision Path Planning Navigation For Unstructured Environments", Proceedings of 24th International Conference on Computers and their Applications Industry and Engineering, (CAINE 2011), 251-256.
57. Ramdane, H.; Alsulaiman, M. and Al-Mutib, K., "Approximated Nonlinear Predictive Control for Trajectory Tracking of a Wheeled Mobile Robot", Proceedings of the 1st IEEE International Conference on Robot, Vision and signal Processing, 2011, 296-299.
58. Mansour Alsulaiman, Awais Mahmood, Ghulam Muhammad, Muhammad A. Bencherif, and Yousef A. Alotaibi, "A Technique to Overcome the Problem of Small Size Database for Automatic Speaker Recognition", Proceeding of the 5th International Conference on Digital Information Management (ICDIM 2010), Lakehead University, Thunder Bay, Canada, July 05-08, 2010
59. Mansour Alsulaiman, Ghulam Muhammad, Yousef Alotaibi, Awais Mahmood, and Mohamed Abdelkader Bencherif "Building a Speaker Recognition System with one Sample", Proceedings of the Second Symposium International Computer Science and Computational Technology(ISCST '09) Huangshan, P. R. China, 26-28,Dec. 2009, pp. 330-334.
60. Alsulaiman, M. M., Alyahya, A. N., Alkharboush, R. A., & Alghafis, N. S. (2009, October). Intrusion detection system using self-organizing maps. In 2009 Third International Conference on Network and System Security (pp. 397-402). IEEE.
61. Al-Dahri, S. S., Al-Jassar, Y. H., Alotaibi, Y. A., Alsulaiman, M. M., & Abdullah-Al-Mamun, K. (2008, December). A word-dependent automatic Arabic speaker identification system. In 2008 IEEE International Symposium on Signal Processing and Information Technology (pp. 198-202). IEEE.
62. Sharaf Eldin, A., M. Al-Suliman, and A. Salama, "Client/Server Technology: Practical Considerations and Experience", Proceedings of the symposium of Computer Networking and Distributed Databases, 3-4 Mar. 1998, Riyadh, Saudi Arabia, pp. 223-232.
63. Al-Sulaiman, M, "Arabic Speech Recognition Using Neural Networks", Proceeding of International Conference on Information Technology and Multimedia at Uniten (ICIMU 98), Malaysia, 1998, pp. SB 6.1-6.9.
64. Khorsheed, M., Ahson, S.I., and Al-Sulaiman M.M., "A New Design Method for Neuro-Fuzzy Controllers", Second Annual Joint Conference on Information on Information Sciences, Willington, USA, Sept. 28 - Oct. 1, 1995.
65. Khorsheed, M., Ahson, S.I., and Al-Sulaiman M.M., "Truck-Backer Control Using Neuro-Fuzzy Systems ", Proceeding of the 2nd Australian & New Zealand Conference on Intelligence Information Systems, Brisbane - Australia, Nov. 29-Dec.2, 1994, pp. 66-70.
66. Al-Sulaiman M.M.; Ahson S.I.; Al-Kanhal M.I.; "Construction of Arabic Phoneme Maps Using Learning Vector Quantization", Proceeding of World Congress on Neural Networks ,Portland, Oregon, July 11-15, 1993, U.S.A, Vol. IV, pp. 84-90.

67. Al-Sulaiman, M.M., Ahson, S.I., Al-Kanhal, M.I “Self Organizing Feature Maps for Arabic Phonemes”, Proceeding of 9th International Conference on Mathematical and Computer Modeling, University of California, Berkeley, July 26-29, 1993.
68. Al-Sulaiman, M.M., Ahson, S.I., Ismail M., and Zaidan, M. “Recognition of Isolated Arabic Words Using Backpropagation Neural Networks”, Proceeding of 9th International Conference on Mathematical and Computer Modeling, University of California, Berkeley, July 26-29, 1993.
69. Refenez A. N., Jain N., and Al-Sulaiman M.M., “Machine Vision Systems Integration in Industry”, Proceeding of SPIE, March 1991, Vol. 1386, p. 62-74.

Technical Reports:

1. M. Alsulaiman, Y. Alotaibi, A. Mahmood, M. A. Bencherif, and Ghulam Muhammad, ”Survey of Arabic Speaker Recognition”.*Research Center, College of Computer and Information Sciences, King Saud University, Riyadh*, Report no. 8, 2011.