

Curriculum Vitae

Prof. Madya Dr. Fatimah Khalid

Academic Graduation

- PhD (*Computer Science*), Universiti Kebangsaan Malaysia 2008.
- *Master of I.T. (Computer Science)*, Universiti Kebangsaan Malaysia 1998.
- *Bachelor of Computer Science*, Universiti Teknologi Malaysia 1993.

Current Teaching and Administrative Responsibilities

Teaching:

- *Multimedia Technology*
- *Introduction to Multimedia*
- *Human Computer Interaction*
- *Data Compression*
- *Digital Image Processing*
- *Computer Vision*
- *Java, C#, C++, Python Programming, Matlab*
- *Database Principles*

Current Administrative Positions:

No

Work Experience

1999 – Present	Lecturer, Universiti Putra Malaysia.
1998 – 1999	Lecturer, Sal.
Jan 2016 – June 2017	Lecturer, Tabuk University, Tabuk, Saudi Arabia
29 Nov – 27 Dec 2021	Visiting Lecturer, M. Auezov South Kazakhstan University, Kazakhstan

Conference and Training

Conferences:

1. **Keynote Speaker**, International Symposium on Artificial Intelligence and Internet of Things in Perspective from Indonesian and Malaysia, paper entitled "Revolutionizing Livestock Management for Food Security", 7 Mei 2024, Universitas Sumatera Utara, Medan, Indonesia.
2. **Presenter**, International Symposium on Artificial Intelligence and Internet of Things in Perspective from Indonesian and Malaysia, paper entitled "Optimizing Dual Training Approaches for Goat Face Recognition", 7 Mei 2024, Universitas Sumatera Utara, Medan, Indonesia.
3. **Presenter**, "International Symposium on Computational Intelligence and Application in Perspective from Indonesia and Malaysia", paper entitled "Individual Buffalo Identification Through Muzzle Dermatoglyphics Images Using Deep Learning Approaches", 8 Mei 2024, Universiti Panca Budi (UnPAB), Medan, Indonesia.
4. **Presenter**, International Symposium on Computer Science for Smart Agriculture, Education, and Medical (CSSAEM) 2023, paper entitled "Herbs Plant Image Classification using Transfer Learning and Fine-Tuning Deep Learning Models", 24 Mei 2023.
5. **Presenter and Session Chair**, 3rd International Conference on Innovations in Computer Science and Engineering (iCiCSE 2022), paper entitled "Be happy", 26 - 28 June 2022, Miri, Sarawak, Malaysia.

6. **Presenter**, 5th International Conference on Applied Science and Technology (ICAST 2021), paper entitled "It is Fri-yay", 1 - 2 April 2021, Johor Bahru, Johor Darul Takzim, Malaysia.

Training:

1. Workshop on Artificial Intelligence, Machine Learning, and Deep Learning using Scilab, IEEE Signal Processing Society Malaysia Chapter, 15 September 2023, Pullman KLCC Hotel, Kuala Lumpur.
2. Workshop on IoT for Elderly, 17 - 18 January 2022, FSKTM, UPM.
3. MCMC Research Symposium, 21 November 2021, Putrajaya Marriott Hotel, Putrajaya.

Research and Publications

Research Project:

1. Extraction of Pulmonary Cavity in Lung CT Scan using Gray Level and Level Set Segmentation Methods for Tuberculosis Severity Score, FRGS,24 months, 2022-2024, RM77,700.00.
2. Formulating Ground Normalized Difference Vegetation Index (G-NDV) for detecting stressed crops using sub-pixel regional registration and sub-pixel temporal analysis. FRGS,36 months, 2022-2024, RM147,800.00.

Publication:

Publication	Quantity
Chapters in the Book	1
Journal	67
Proceedings	42
Copyright/ Patent/ <i>Trademark</i>	20
Articles (Magazines and so on)	0

List of Publications (Journals):

1. Rana Ranjeet Singh, Fatimah Binti Khalid, Timur Rampalsingh Ahlawat, Mahantappa Sangappa Sankanur, Azreen Bin Azman, Anuradha Agrawal and Perna Ghorpade. (2024). Individual Buffalo Identification Through Muzzle Dermatoglyphics Images Using Deep Learning Approaches. *Journal of Advanced Research in Applied Sciences and Engineering Technology*. (Accepted)
2. Yu Liu, Yang Ding, Fatimah binti Khalid, Xin Li, Mas Rina binti Mustafa, Azreen bin Azman. (2024). Unsupervised Font Generation Networks for Joint Content and Style Representation[J]. *Journal of Computer-Aided Design & Computer Graphics*, 3(202), 1-13.
3. Liu, Y., Khalid, F.B., Wang, C., Mustafa, M.R.B., Azman, A.B. (2024). An end-to-end Chinese font generation network with stroke semantics and deformable attention skip-connection. *Expert Systems with Applications* (T10), 237(B), 1-13.
4. Liu, Y., Khalid, F.B., Wang, C., Mustafa, M.R.B., Azman, A.B. (2024). Dual-modality learning and transformer-based approach for high-quality vector font generation. *Expert Systems with Applications* (T10), 240, 1-19.
5. Fatimah Khalid, Amirul Azuani Romle (2024). Herbal Plant Image Classification using Transfer Learning and Fine-Tuning Deep Learning Model. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 1-10.
6. Tan, Z., Madzin, H., Norafida, B., Rahmat, R. W. O., Khalid, F., & Sulaiman, P. S. (2024). SwinUNeLCsT: Global–local spatial representation learning with hybrid CNN–transformer for efficient tuberculosis lung cavity weakly supervised semantic segmentation. *Journal of King Saud University-Computer and Information Sciences*, 36(4), 102012.
7. Han, Z., Azman, A., Khalid, F., & Mustafa, M. R. (2024). Multi-Granularity Semantic Information Integration Graph for Cross-Modal Hash Retrieval. *IEEE Access*.

8. Sulaiman, P. S., Khalid, F., Azman, A., & Hanafi, M. (2024). Reviewing Vegetation Indices for Mobile Application: Potentials and Challenges. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 35(2), 33-46.
9. Zhuoyi Tan, Hizmawati Madzin, Fatimah Khalid, Ng Seng Beng (2023). Segmentation of Pulmonary Cavity in Lung CT Scan for Tuberculosis Disease. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 33, 98-106.
10. Ahmed Zwaid, J.M., Murad, M.A.A., Khalid, F.B., Manshor, N. (2023). A novel two-stage Lung nodule detection in medical images based on deep learning. *Journal of Physics: Conference Series*, 1-8.
11. Zwaid, J.M.A., Murad, M.A.A., Khalid, F.B., Manshor, N., Al-Jumaily, A. (2023). Medical Image Analysis of Lung Tumor Diagnosis Based on Generalized Fuzzy C-Means Clustering Algorithm. *Journal of Physics: Conference Series*, 1-9.
12. Sun, W., Abdullah, L. N., binti Khalid, F., & binti Sulaiman, P. S. (2023). Intelligent Analysis of Vehicle Accidents to Detect Road Safety: A Systematic Literature Review.
13. Samieiyeganeh, M., Rahmat, R.W.B.O.K., Khalid, F.B., Bin Kasmiran, K.A. (2022). Deep Reinforcement Learning to Multi-Agent Deep Reinforcement Learning. *Journal of Theoretical and Applied Information Technology*, 100(4): 990-1003.
14. Zainal Abdul Kahar, Puteri Suhaiza Sulaiman, Fatimah Khalid, Azreen Azman. (2021). Skeleton Joints Moment (SJM): A Hand Gesture Dimensionality Reduction for Central Nervous System Interaction. *IEEE Access*, 9, 146640-146652.
15. Al-Rababah, K., Mustafa, M.R., Doraisamy, S.C., Khalid, F., de Pina, L.F. (2021). Hybrid Discrete Wavelet Transform and Texture Analysis Methods for Feature Extraction and Classification of Breast Dynamic Thermogram Sequences. *Malaysian Journal of Computer Science Special Issue 2*, 116-131.
16. Fatimah Khalid, Noor Amjed, RahmitaWirza O.K. Rahmat, Hizmawati Madzin, Illiana Azizan. (2020). Face Recognition for Varying Illumination And Different Optical Zoom Using A Combination Of Binary And Geometric Features. *IEEE Access*, 8, 129774-129784.
17. Eman Thabet, Fatimah Khalid, Puteri Suhaiza Sulaiman and Razali Yaakob. (2020). Algorithm Of Local Features Fusion And Modified Covariance-Matrix Technique For Hand Motion Position Estimation And Hand Gesture Trajectory Tracking Approach. *Multimedia Tools and Applications*, 79, 1-33.
18. Sukba Safa, Fatima Khalid. (2020). An Improved Plant Identification System by Fuzzy c-means Bag of Visual Words Model and Sparse Coding. *International Journal of Advanced Trends in Computer Science and Engineering*, 9, 5229-5235.
19. Pei Voon Wong, Norwati Mustapha, Lilly Suriani Affendey, Fatimah Khalid. (2020). A Crowd Video Retrieval Framework using Generic Descriptors. *Journal of Computers*, 31, 34-45.
20. Samieiyeganeh, M, Rahmita, R.W.B.O.K, Khalid, F.B., Kasmiran, K.A.B. (2020). An overview of deep learning techniques in echocardiography image segmentation. *Journal of Theoretical and Applied Information Technology*, 98, 3561-3572.
21. Mas Rina Mustafa, Indra Nachammai Nachiappan, Lili Nurliyana Abdullah, Fatimah Khalid, Masnida Hussin. (2020). Grain Recognition based on Colour and Shape Analysis. *International Journal of Advanced Science and Technology*, 29, 1512-1522.
22. Ovy John Abari, Nor Fazlida Mohd Sani, Fatimah Khalid, Mohd Yunus Bin Sharum, Noor Afiza Mohd Ariffin. (2020). Phishing Image Spam Classification Research Trends: Survey and Open Issues. *International Journal of Advanced Computer Science and Applications*, 11, 794-805.
23. Luyao Sun, Noridayu Manshor, and Fatimah Khalid. (2020). Review Of Chinese Calligraphy Font Recognition Methods. *International Journal of Advanced Research in Engineering and Technology*, 11, 1176-1186.
24. Noor Amjed, Fatimah Khalid, RahmitaWirza O.K. Rahmat, Hizmawati Binit Madzin. (2019). A Robust Geometric Skin Colour Face Detection Method under Unconstrained Environment of Smartphone. *Database Applied Mechanics and Materials*, 892, 31-37.
25. Mohammed W. Ashour, Fatimah Khalid, Lili N. Abdullah, Alfian A. Halin. (2019). Surface Defects Classification of Hot-Rolled Steel Strips Using Multi-directional Shearlet Features. *Arabian Journal for Science and Engineering (Q1)*, 44, 2925-2932.
26. Pei Voon Wong, Norwati Mustapha, Lilly Suriani Affendey, Fatimah Khalid. (2019). Collective interaction filtering approach for detection of group in diverse crowded scenes. *KSII Transactions on Internet and Information Systems (Q3)*, 13, 912-928.
27. Zheng S., Rahmat R.W. O, Khalid F., Nasharuddin N.A. (2019). 3D texture-based face recognition system using fine-tuned deep residual networks. *PeerJ Computer Science (Q2)*, 5, e236.

28. Nur Delliera Shahiera Shaharom, Mas Rina Mustaffa, Lily Nurliyana Abdullah, Fatimah Khalid. (2019). Durian Species Recognition based on Fast Discrete Curvelet Transform and K-Nearest Neighbour. *International Journal of Advanced Trends in Computer Science and Engineering*, 8, 323-331.
29. Noor Amjed, Fatimah Khalid, RahmitaWirza O.K. Rahmat, Hizmawati Binit Madzin. (2018). Noncircular Iris Segmentation Based On Weighted Adaptive Hough Transform Using Smartphone Database. *Journal of Computational and Theoretical Nanoscience* (Q3), Vol. 15, No. 2, 739-743(5).
30. Noor Amjed, Fatimah Khalid, RahmitaWirza O.K. Rahmat, Hizmawati Binit Madzin. (2018). Binary conversion method based on illumination distribution model under unconstrained smartphone face database. *Journal of Advanced Computer Science and Technology Research*, Vol. 8, No. 3, 82-93.
31. Eman Thabet, Fatimah Khalid, Puteri Suhaiza Sulaiman and Razali Yaakob. (2018). Fast marching method and modified features fusion in enhanced dynamic hand gesture segmentation and detection method under complicated background. *Journal of Ambient Intelligence and Humanized Computing* (Q1), Vol. 9, No. 3, 755-769.
32. Chamasemani, F.F., Affendey, L.S., Mustapha, N., Khalid, F. (2018). Video abstraction using density-based clustering algorithm. *Visual Computer* (Q2), Vol. 34, No. 10, 1299-1314.
33. Chamasemani, F.F., Affendey, L.S., Mustapha, N., Khalid, F. (2018). Region-based surveillance video retrieval with effective object representation. *Imaging Science Journal*(Q2), Vol. 66, No. 3, 184-194.
34. Eman Thabet, Fatimah Khalid, Puteri Suhaiza Sulaiman and Razali Yaakob. (2017). Low Cost Skin Segmentation Scheme in Videos using Two Alternative Methods for Dynamic Hand Gesture Detection Method, *Advances in Multimedia (Hindawi)* (Q4), 1-9.
35. Eman Thabet, Fatimah Khalid, Puteri Suhaiza Sulaiman and Razali Yaakob. (2017). BRISK Local Corner Keypoints based Hand Position Estimation for Hand Gesture Trajectory Tracking Method. *Journal of Advanced Science and Engineering Research*, Vol. 7, No. 1, 43-57.
36. Husniza Razalli, H., Rahmat, R.W.O.K., Khalid, F., Sulaiman, P.S. (2017). An image-based children age range verification and classification based on facial features angle distribution and face shape elliptical ratio. *Advanced Science Letters*, Vol. 23, No. 5, 4026-4030.
37. Mohammed W. Ashour, Fatimah Khalid, Alfian A. Halin. (2016). Multi-Class Support Vector Machines For Texture Classification Using Gray-Level Histogram And Edge Detection Features. *International Journal Of Advances In Electronics And Computer Science*, Vol. 3, No.3, 1-5.
38. Soodabeh Safa, Fatimah Khalid, Lili Nurliyana Abdullah, Azreen Azman. (2016). Multi View K-SVD Dictionary Learning for Plant Identification. *International Journal of Applied Engineering Research* (Q3), Vol. 10, No. 6, 14939-14951.
39. S.H. Davarpanah, F Khalid, LN Abdullah, and M. Golchin. (2016). A Texture Descriptor: Background Local Binary Pattern (BGLBP). *Multimedia Tools and Applications* (Q1), Vol. 75, No. 11, 6549-6568.
40. Husniza Razalli, Rahmita Wirza O.K. Rahmat, Fatimah Khalid, Puteri Suhaiza Sulaiman. (2016). Automated Facial Features Points Localization for Age Estimation Based on Ideal Frontal Symmetry and Proportion of the Face. *Journal of Telecommunication, Electronic and Computer Engineering*, Vol. 8, No. 10, 67-72.
41. Rohullah Mousavi Taebi, Rahmita Virza, Putri C.B. Suleiman, Mohr Zamrin Dimon, Fatimah Khalid, Aqeel al-Surmi and Samaneh Mazheri. (2015). 3D multimodal cardiac data reconstruction using angiography and computerized tomographic angiography registration. *Journal of Cardiothoracic Surgery*, 1-25.
42. Fereshteh Falah Chamasemani, Lilly Suriani Affendey, Norwati Mustapha and Fatimah Khalid. (2015). A Framework for Automatic Video Surveillance Indexing and Retrieval. *Research Journal of Applied Sciences, Engineering and Technology*, Vol. 10, No. 11, 1316-1321.
43. Fereshteh Falah Chamasemani, Lilly Suriani Affendey, Norwati Mustapha and Fatimah Khalid. (2015). Automatic Video Annotation Framework Using Concept Detectors. *Journal of Applied Sciences*, Vol. 15, No. 2, 256-263.
44. Mohammed W. Ashour, Fatimah Khalid, Lili N. Abdullah, Alfian A. Halin. (2014). Artificial Neural Network-Based Texture Classification Using Reduced Multidirectional Gabor Features. *International Review on Computers and Software (I.RE.CO.S.)*, Vol. 9, No. 6, 1007-1016.
45. Aqeel A. Al-Surni, Rahmita W. Rahmat, Ramlan B. Mahmud, Fatimah B. Khalid and Zamrin Dimon. (2014). A New Human Heart Vessel Identification Segmentation and 3D Reconstruction Mechanism. *Journal of Cardiothoracic Surgery*, Vol. 9, No. 1, 161-191.

46. Roollah Moosavi Tayebi, Puteri Suhaiza Sulaiman, Rahmita W. Rahmat, Mohd. Zamrin Dimon, Suhaini Kadiman, Fatimah Khalid, Samaneh Mazaherin. (2014). A Fast and Accurate Method for Automatic Coronary Arterial Tree Extraction in Angiograms. *Journal of Computer Science*, Vol. 10, No. 10, 2060-2076.
47. M. Golchin, Fatimah Khalid, Davarpanah S. H., N.A. Lili. (2013). Shadow Detection using Color and Edge Information. *Journal of Computer Science*, Vol. 9, No. 11, 1575-1588.
48. Gaweed Nagi, Rahmata Virza Rahmat, Muhammad Taufiq Abdullah, Fatima Khalid. (2013). Multimodal 2D-3D Face Recognition. *International Journal of Future Computer and Communication*, Vol. 2, No. 6, 687-691.
49. Siti Khadijah Ali, Rahmita Wirza Rahmat, Fatimah Khalid, Hassan H. Khalil. (2013). Rational Equation for Simplifying Complex Surfaces. *The Arabian Journal for Science and Engineering*, Vol. 39, No. 6 (IF:0.243), 4617-4636.
50. Aqeel A. Al-Surni, Rahmita W. Rahmat, Ramlan B. Mahmud, Zamrin Dimon and Fatimah B. Khalid. (2013). 3D Reconstruction of Human Heart Surface from Single Image-View under Different Illumination Conditions. *American Journal of Applied Sciences*, Vol. 10, No. 7, 669-680.
51. Gawed Nagi, Rahmita Wirza Rahmat, Muhamad Taufik Abdullah, Fatimah Khalid. (2013). Region-based Facial Expression Recognition in Still Images. *Journal of Information Processing Systems (JIPS)*, Vol. 9, No. 1, 173-188.
52. Davarpanah S. H., Fatimah Khalid, M. Golchin. (2012). An Effective History-based Background Extraction System. *Journal of Computer Science*, Vol. 8, No. 7, 1062-1069.
53. Davarpanah, S.H., Fatimah Khalid, N.A. Lili, S.S. Puteri and M. Golchin. (2012). Using Multi-Scale Filtering to Initialize a Background Extraction Model. *Journal of Computer Science*, Vol. 8, No. 7, 1077-1084.
54. H.K. Bashier, E. Abdu Abusham and F. Khalid. (2012). Face Detection Based on Graph Structure and Neural Networks. *Academic Journals Inc.*, Vol. 7, No. 8, 683-691.
55. Eimad Eldin Abdu Abusham, Housam Khalifa Bashier, Fatimah Khalid, Shohel Sayeed, Jakir Hossen and S.M.A. Kalaiarasi. (2012). Illumination Normalization using Eimad-housam Technique. *Academic Journals Inc.*, Vol. 7, No. 8, 692-700.
56. Seyed Hashem Davarpanah, Fatimah Khalid and Maryam Golchin. (2010). A Block-Based Multi-Scale Background Extraction Algorithm. *Journal of Computer Science*, Vol. 6, No. 12, 1445-1451.
57. Fatimah Khalid, Lili N. A. (2009). 3D Face Recognition Using Multiple Features for Local Depth Information. *International Journal of Computer Science and Network Security (IJCSNS)*, Vol. 9, No. 1, 27-32.
58. Fatimah Khalid, Tengku Mohd. Tengku Sembok, & Khairuddin Omar. (2007). Six Anchor Points Detection by Direct Points Calculation. *Jurnal of ICT*, Vol. 6, 59-72.
59. Housam Khalifa bashier, Eimad Eldin Abdu Abusham and Fatimah Khalid. (2011). Face Recognition Using Housam-Eimad. *Journal of Measurement Science and Instrumentation*, Vol. 2, 69-73.
60. Housam Khalifa bashier, Eimad Eldin Abdu Abusham and Fatimah Khalid. (2011). Graph Structure and Correlation Coefficient for Face Detection. *Journal of Measurement Science and Instrumentation*, Vol. 2, 79-83.
61. Gawed Nagi, Rahmita Wirza Rahmat, Muhamad Taufik Abdullah, Fatimah Khalid. (2012). Face Detection and Recognition in AAS. *International Review on Computers and Software (IRECOS)*, vol. 7, no. 3, 959-964.
62. Lili N.A, F. Khalid, N.M. Borhan. (2011). Classification of herbs plant diseases via hierarchical dynamic artificial neural network after image removal using kernel regression framework. *International Journal on Computer Science and Engineering*, Vol 3, No 1, 15-20.
63. Lili N.A., N.M. Borhan and F. Khalid. (2011). Herbs Plant Disease Recognition via Hierarchical Dynamic Artificial Neural Network. *Advance in Multimedia - An International Journal*, Vol. 3, No. 1, 1-6.
64. Siti Khadijah Ali, Rahmita Wirza O. K. Rahmat, Fatimah Khalid & Ng Beng Seng. (2011). Mesh Simplification – A New Approach. *Jurnal Teknologi*, 56 (Sains & Kej.), 65–82.
65. Lili N.A, F. Khalid, N.M. Borhan. (2010). Classification of Herbs Plant Diseases via Hierarchical Dynamic Artificial Neural Network. *Journal of Computer Science and Engineering*, Vol 4, No 1, 18-23.
66. Lili N. A. & Fatimah K. (2009). Content Modeling for Human Action Detection via Multidimensional Approach. *International Journal of Image Processing*, Vol. 3, No. 1, 17-30.
67. Lili N. A., Fatimah Khalid. (2009). Extracting and Integrating Multimodality Features via

List of Publications (Prosiding):

1. Fatimah Khalid, Azfar Husna Abdullah and Lili Nurliyana Abdullah. (2022). SMARTFLORA Mobile Flower Recognition Application using Machine Learning Tools. *IEEE 18th International Colloquium on Signal Processing & Applications*, 204-209.
2. Fatimah Khalid, Nur Afiqah Kaman and Fatin Aliah Mohd Razib. (2021). Lossless Compression Techniques: Review, Comparison and Analysis. *11th International Conference on Internet Technologies & Society*.
3. Khaleel Al-Rababah, Mas Rina Mustaffa, Shyamala C. Doraisamy, Fatimah Khalid. (2021). Hybrid Discrete Wavelet Transform and Histogram of Oriented Gradients for Feature Extraction and Classification of Breast Dynamic Thermogram Sequences. *Fifth International Conference on Information Retrieval and Knowledge Management (CAMP)*, 31-35.
4. Mohammed W. Ashour, Fatimah Khalid, Alfian Abdul Halin, Samy H. Darwish. (2020). A Review on Steel Surface Image Features Extraction and Representation Methods. *International Conference for Emerging technologies in Computing*, 239-250.
5. Khaleel Al-Rababah, Mas Rina Mustaffa, Shyamala Doraisamy, and Fatimah Khalid. (2020). Hybrid Discrete Wavelet Transform And Histogram Of Oriented Gradients For Feature Extraction And Classification Of Breast Dynamic Thermogram Sequences. *Seminar on Information Retrieval and Knowledge Management 2020 (SIRKM'20)*, 54-56.
6. Noor Amjed, Fatimah Khalid, Rahmita Wirza O.K. Rahmat, Hizmawati Bint Madzin. (2019). An Efficient Non-Occluded Face Area Detection Method under Unconstrained Environment of Smartphone Database. *The IEEE International Conference on Signal and Image Processing Applications (ICSIPA)*.
7. Noor Amjed, Fatimah Khalid, Rahmita Wirza O.K. Rahmat, Hizmawati Bint Madzin. (2018). A Robust Geometric Skin Colour Face Detection Method under Unconstrained Environment of Smartphone Database. *Third International Conference on Computational Science and Engineering (ICCSE2018)*.
8. Noor Amjed, Fatimah Khalid, Rahmita Wirza and Hizmawati Madzin. (2018). Accurate Binary Conversion Method based on Illumination Distribution Model under Unconstrained Smartphone Face Database. *International Conference on Computer Assisted Systems in Health CASH2018*.
9. Chamasemani, F.F., Affendey, L.S., Mustapha, N., Khalid, F. (2018). Surveillance Video Retrieval Using Effective Matching Techniques. *Proceedings - 2018 4th International Conference on Information Retrieval and Knowledge Management: Diving into Data Sciences, CAMP 2018*, 137-141.
10. Eman Thabet, Fatimah Khalid, Puteri Suhaiza Sulaiman and Razali Yaakob. (2017). Hand Gesture Trajectory Estimation Using Keypoints Combination of Brisk and Minimum Eigenvalue Techniques for Human Computer Interaction Applications. *Research Article in First EAI International Conference on Computer Science and Engineering*, 1-5.
11. Yahya, Z., Rahmat, R.W., Khalid, F., Rizaan, A., Rahman, R. (2017). An automated 3D modelling application based on vertices from 2D paper sketches. *ACM International Conference Proceeding Series*, 289-293.
12. Chamasemani, F.F., Affendey, L.S., Mustapha, N., Khalid, F. (2017). Speeded up surveillance video indexing and retrieval using abstraction. *Proceedings of the 2017 IEEE International Conference on Signal and Image Processing Applications (ICSIPA 2017)*, 374-378.
13. Eman Thabet, Fatimah Khalid, Puteri Suhaiza Sulaiman and Razali Yaakob. (2016). BRISK Local Corner Keypoints based Hand Position Estimation for Hand Gesture Trajectory Tracking Method. *CASH 2016*.
14. Mohammed W. Ashour, Fatimah Khalid, Alfian Abdul Halin, Samy H. Darwish. (2016). Multi-Class Support Vector Machines for Texture Classification Using Gray-Level Histogram and Edge Detection Features. *International Conference on Recent Innovation in Engineering and Technology (ICRIET)*.
15. Voon, W.P., Mustapha, N., Affendey, L.S., Khalid, F. (2016). A new clustering approach for group detection in scene-independent dense crowds. *3rd International Conference on Computer and Information Sciences, ICCOINS 2016 – Proceedings*, 414-417.

16. Chamasemani, F.F., Affendey, L.S., Mustapha, N., Khalid, F. (2016). A study on surveillance video abstraction techniques. *Proceedings - 5th IEEE International Conference on Control System, Computing and Engineering, ICCSCE 2015*, 470-475.
17. Chamasemani, F.F., Affendey, L.S., Mustapha, N., Khalid, F. (2015). Object detection and representation method for surveillance video indexing. *IEEE International Conference on Smart Instrumentation, Measurement and Applications, ICSIMA 2015*.
18. Fatimah Khalid, Zainal Abdul Kahar. (2015). Heterogeneous Optical Flow-Based Tracking for Traffic Control. *International Postgraduate Conference on Social Science, Science and Technology (IPCSSST 2015)*.
19. Mohammed W. Ashour, Fatimah Khalid, Alfian Abdul Halin and Lili Nurliyana Abdullah. (2015). Machining Process Classification using PCA-Reduced Histogram Features and the Support Vector Machine. *2015 IEEE International Conference on Signal and Image Processing Applications*, 414-418.
20. Soodabeh Safa, Fatimah Khalid, Lili Abdullah and Azreen Azman. (2014). A New Bag of visual Words model Using Fuzzy c-means Clustering for plant Classification. *The 3rd International Conference on International Digital Media (ICIDM 2014)*, 1-4.
21. Mohammed W. Ashour, Fatimah Khalid, Mohammed Al-Obaydee. (2013). Supervised Ann Classification For Engineering Machined Textures Based On Enhanced Features Extraction And Reduction Scheme. *International Conference on Artificial Intelligence in Computer Science and ICT (AICS 2013)*, 71-80.
22. Abdallah A. Alomari, Fatimah Khalid, Rahmita O.K. Wirza and Muhamad Taufik Abdullah. (2010). A State of Art on Image-Based Face Recognition Approaches. *2010 International Conference on Intelligent Network and Computing (ICINC 2010)*, V1-18.
23. Abdallah A. Alomari, Fatimah Khalid, Rahmita O.K. Wirza and Muhamad Taufik Abdullah. (2010). Expression Invariant Face Recognition using Multi-Stage 3D Face Fitting with 3D Morphable Face Model. *2010 International Conference on Computer Applications and Industrial Electronics (ICCAIE 2010)*, 1-5.
24. Fatimah Khalid, Tengku Mohd. Tengku Sembok and Lili N. A. (2009). 3D Facial Feature Localization for Verification. *International Conference on Robotics, Vision, Information and Signal Processing*, P1204.
25. Abdallah A. Alomari, Fatimah Khalid, Rahmita O.K. Wirza and Muhamad Taufik Abdullah. (2011). A state of art on 3D face modeling approaches International. *Conference on Electrical Engineering and Informatics (ICEEI2011)*, B1-5.
26. Gawed Nagi, Rahmita Wirza Rahmat, Muhamad Taufik Abdullah, Fatimah Khalid. (2010). Face Recognition in Real-Time Environments. *Proceeding of 3rd International Conference on Machine Vision (ICMV 2010)*.
27. City Khadijah Ali, Rahmita Virja, Fatima Khalid. (2010) | Mesh Simplification. *Proceeding of Annual International Conference on Infocomm Technologies in Competitive Strategies (ICT2010)*, 1-86.
28. Rahmita Wirza, Aqeel A. Al-Surmi, Mohd. Zamrin Dimon, Ramlan Mahmud and Fatimah Khalid. (2012). Single Image Reconstruction of Human Heart Surface with Specular Reflection Remover. *Proceeding of International Conference on Advanced Computer Science Applications and Technologies ACSAT 2012*.
29. Hazura Zulzalil, Nur Izura Udzir, Fatimah Khalid, Rusli Abdullah, Azrina Kamaruddin. (2001). A Study on Usability Web Pages Using Heuristic Evaluation. *Proceeding of the International Conference in Information Technology and Multimedia*, 479-484.
30. Fatimah Khalid, Azrina Kamaruddin, Hazura Zuljalil, Noraini Che Pa, Yusmadi Ya Jusoh. (2002) | A Study on Usability Web Pages Using Heuristic Evaluation. *Second World Engineering Congress 2002*, 22-25 July 2002, Kuching, Sarawak.
31. Fatimah Khalid, Azrina Kamaruddin, Hazura Zuljalil, Noraini Che Pa, Rabia A. Qadir. (2002) | EASYLAH: A Prototype of On-line Survey using Multimedia Effect and Marketing Strategy in Malaysia. *Second World Engineering Congress 2002*, 22-25 July 2002, Kuching, Sarawak, 503-507.
32. Fatimah Khalid & Tengku Mohd. Tengku Sembok. (2005). Three-dimensional Model Based Face Recognition : A Literature Overview. *Proceedings of Brunei International Conference On Engineering And Technology*, 73-78.
33. Fatimah Khalid, Tengku Mohd. Tengku Sembok, & Khairuddin Omar. (2005). A Gradient-based Facial Composition on System. *Proceeding of International Conference on Robotics, Vision, Information and Signal Processing*, 819-823.

34. Fatimah Khalid, Tengku Mohd. Tengku Sembok. (2007). A Set of Scalar Features Representation for 3D Face. *Proceedings of 2nd International Conference on INFORMATICS*, T5-11.
35. Fatimah Khalid, Tengku Mohd. Tengku Sembok. (2007). Face Recognition Using 24 3D Local Geometrical Features: PCA. *Proceedings of Computer Artificial Intelligence Technology Conference*.
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Copyright:

1. Texture Synthesis Application, Software, 2011.
2. MirrorLite Mobile Application, Software, 2012.
3. Moving Object Detection System : MODE, Software, 2012.
4. Sepia Transformation Tool (St2), Software, 2012.
5. Online Food Ordering System Design, Software, 2011.
6. Static Object-oriented Debugger, Software, 2012.
7. Design of Object-oriented Debugger, Literacy Work, 2012.
8. mindIT word Puzzle, Literacy Work, 2011.
9. e-Counseling System Specification and Design, Literacy Work, 2011.
10. P'SAMAK System, Software, 2011.
11. P'SAMAK Database Design, Software, 2011.
12. Simple Network Protocol (SNMP) Data Retrieval Application, Software, 2011.
13. Texture Synthesis Application, Software, 2011.
14. E-Medical system, Universiti Putra Malaysia, Software, 2011.
15. e-Counseling System, Software, 2011.
16. Human Resource Science System (SISMAN), Software, 2011.
17. System Design for Dialogue-based Train Information System, Software, 2011.
18. Framework of Information Retrieval System, Literacy Work, 2011.
19. Database Design for Trusted Human Resource Management System (THRMS), Software, 2011.
20. Face Recognition System, Software, 2013.

Consultancy

- Continuous research collaboration on livestock management with Navsari and Kamdhenu University, India from 2023 until now.

Community Service

1. International Community Service Programme at Yayasan Pantu Budi Bani Adam, Medan, Indonesia, 2024.
2. International Community Service Programme at Pance Budi Secondary School, Medan, Indonesia, 2024.

- Collaboration Program with Sekolah Menengah Kebangsaan Bandar Baru Ampang, 2023.
- UPM's Pre-AKRAB CSR Program with the orphans of Rumah Bakti Nur Ain, Bangi, 2022-2023.
- Collaboration Program with Sekolah Menengah Kebangsaan King George V (SMKKGV) – 2D Animation, 2022-2023.
- Community Program to *MRSM School, Kuala Kelawang*, 6 October, 2017.
- Community Program to *Sungai Ruil Orang Asli Village, Cameron Highland*, June 25 – 26, 2010.
- Volunteer for provision of assistance to the disaster victims at *Perkampungan Orang Asli Sungai Ruil, Cameron Highland*, August 16, 2011.
- Community Program to *Rumah Amal Anak Ortim, Kampung Sungai Manggis, Selangor*, 2011.

Other Related Information

Supervision:

Program	Status	Chairman	Ahli
PhD	Graduated	4	10
	Current	4	4
Masters (with thesis)	Graduated	1	1
	Current	1	3
Master's by Coursework (with thesis)	Graduated	No	4
	Current	No	No

Award:

No

Professional Body Membership:

No

More information :

- [Fatimah Khalid \(0000-0002-5791-065X\) - ORCID](#)
- [FATIMAH BINTI KHALID / FSKTM - Google Scholar](#)
- [Khalid, Fatimah Binti - Author details - Scopus](#)