



# RASEEDA HAMZAH (DR)

SENIOR LECTURER  
FAKULTI SAINS KOMPUTER DAN MATEMATIK  
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✓ Artificial Intelligence ✓ Deep Learning ✓ Signal Processing

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H-INDEX CITATION H-INDEX CITATION H-INDEX CITATION  
(WOS) (WOS) (SCOPUS) (SCOPUS) (GOOGLE SCHOLAR) (GOOGLE SCHOLAR)

## AWARD

- RECTOR SPECIAL AWARD FOR PUBLICATION (2026)
- BESTARI 2022, 2023 & 2024 & 2025
- PERSAMA 2020 & 2022
- INNOVATION 2021
- OUTSTANDING RESEARCHER AWARD RAECAS LANGKAWI 2019
- BEST PAPER AWARD ICONDA SABAH 2022
- BEST PAPER AWARD INTERNATIONAL POWER ENGINEERING OPTIMIZATION AND COMPUTING CONFERENCE 2020
- BEST PAPER AWARD CSSR INTERNATIONAL CONFERENCE ON SCIENCE AND SOCIAL RESEARCH 2020
- BEST PRESENTER AWARD ICFGCN 2012
- BEST PAPER AWARD ICFGCN 2012

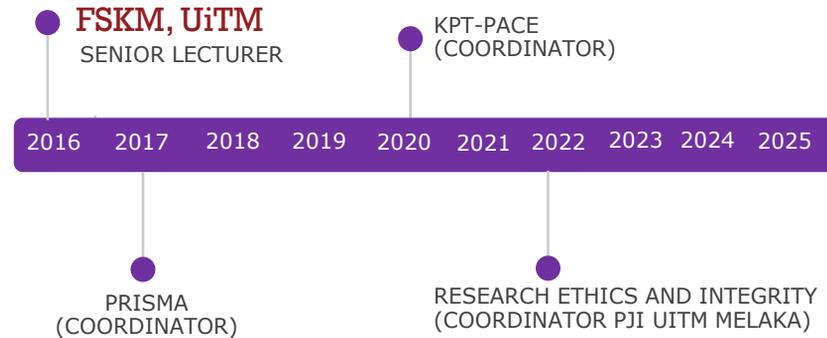
## RESEARCH & PUBLICATION

- PUBLISHED 38 JOURNAL ARTICLES (9-WOS AND 26-SCOPUS INDEXED JOURNALS)
- PUBLISHED 6 HIGH-INDEXED JOURNAL ARTICLES [4] Q1 and [2] Q2
- PUBLISHED 13 SCOPUS INDEXED PROCEEDINGS
- RECEIVED 23 RESEARCH GRANTS (5 AS PI, 15 AS MEMBER)
- RECEIVED 5 AWARDS IN INTERNATIONAL INNOVATION COMPETITIONS (1 GOLD 2 SILVER 2 BRONZE)
- 5 COPYRIGHT (IPR)
- 1 TRADEMARK

## EDUCATION

- 2016** Universiti Teknologi MARA  
PhD in Information Technology and Quantitative Sciences
- 2010** University of Malaya  
Master in Computer Science
- 2007** Universiti Teknikal Malaysia  
Bachelor (Hons) Electronic Engineering Major in Computer Engineering

## CAREER TIMELINE



## PROJECT (PI)



## CONFERENCE

- PRESENTER: 11
- COMMITTEE: 4
- AWARD: (4 BEST PAPER AND 1 BEST PRESENTER)
- INVITED SPEAKER: 1

## CONTRIBUTIONS

- PANELLIST, WORLD STANDARDS DAY 2021 (NATIONAL LEVEL)
- COMMITTEE OF NATIONAL SCIENCE WEEK 2024 (NATIONAL LEVEL)
- TRAINER/SPEAKER FOR ICT SHORT COURSE PROFESSIONAL CERTIFICATION ON BIG DATA ANALYTICS 2022 (NATIONAL LEVEL)
- COMMITTEE OF PJI MELAKA STRATEGIC PLANNING (UNIVERSITY LEVEL)
- MENTOR FOR JOURNAL PUBLICATION PROGRAM (FACULTY LEVEL)

## SUPERVISION

- MAIN SUPERVISION**
  - 2 PHD COMPLETED
  - 1 MASTER ONGOING
- CO-SUPERVISION**
  - 8 PHD ONGOING



# DR RASEEDA HAMZAH

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Google Scholar ID: <https://scholar.google.com/citations?user=nxiNb4AAAAAJ&hl=en>

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## FIELD OF EXPERTISE

- DIVISION OF EXPERTISE: INFORMATION, COMPUTER AND COMMUNICATIONS TECHNOLOGY (ICT)
- GROUP OF EXPERTISE: ARTIFICIAL INTELLIGENCE
- AREA OF EXPERTISE: COMPUTATIONAL INTELLIGENCE, SIGNAL PROCESSING
- RESEARCH NEXUS UiTM (RENEU): CYBER TECHNOLOGY

## QUALIFICATION

- DOCTOR OF PHILOSOPHY IN INFORMATION TECHNOLOGY AND QUANTITATIVE SCIENCES (PHD), UNIVERSITI TEKNOLOGI MARA, CAWANGAN SHAH ALAM
- MASTER OF COMPUTER SCIENCE (SARJANA (MASTER)), UNIVERSITI MALAYA
- BACHELOR OF ELECTRONICS ENGINEERING (COMPUTER ELECTRONICS) WITH HONOURS (IJAZAH SARJANA MUDA (KEPUJIAN)), UNIVERSITI TEKNIKAL MALAYSIA

## RESEARCH PROJECT

### Active (Principal Investigator)

- Robust Face Annotation Model Through Modified Label Propagation Algorithm By Integrating Shared Nearest Neighbor And Kernel-based Similarity 2024 - 2026 | Fundamental Research Grant Scheme (FRGS) | RM 80,100.
- Lightweight Deep Neural Network Pruning Modeling Based On Adaptive Approximate General Matrix Multiplication And Iterative Structured Filter Fusion 2024 - 2025 | Other Grants (OTHER GRANTS) | RM 5,000.

### Active (Project Member)

- A Hybrid Deep Learning Model With Multi-data-driven Approaches For Evacuation Safety Risk Assessment In High-rise Buildings 2024 - 2027 | Fundamental Research Grant Scheme (FRGS) | RM 120,900.
- Smart Personalized Autism Collaborative Education System (Spaces) 2021 - 2024 | (MOSTI-YIM) | RM 908,145.
- Collaborative Intelligent Education Platform (CIIP) Using Model-View-Controller Architecture 2021 - 2024 | MOSTI-YIM) | RM 207,600.
- Cyber Resilience Autism Education Data Centre Using Virtualization Platform 2021 - 2024 | Mosti-yim (MOSTI-YIM) | RM 153,095.
- Intelligent Chatbot 2021 - 2024 | Mosti-yim (MOSTI-YIM) | RM 48,000.

### Completed (Principal Investigator)

- Customizing Tversky Index for Generalization of Similarity Measure in Spatio-temporal Clustering - Fundamental Research Grant Scheme (FRGS) | 51, 200.
- Smart Urban Farming for Vegetables (V-SURF) | Private grant Malaysian Technical Standard Forum Berhad | RM 83, 000.
- Digital Image, Audio and Speech Technology (Diast) | University Grant | RM32, 000.

## **Completed (Project Member)**

1. Technology- Enhanced Continuous Monitoring of Individualized Education| MOSTI | RM 31, 000.
2. Passive Acoustic Monitoring of Lowland Forest Birds in Taman Negara | University Grant | RM 20,000.
3. Associative Learning Method for Pose Graph Optimization in Loop-closure Detection, Simultaneous Localization and Mapping| Fundamental Research Grant Scheme (FRGS) | RM 117,800.
4. An Intelligent Indoor Evacuation Assessment Algorithm for Critical Incident. Fundamental Research Grant Scheme | RM 51,200.
5. Light Detection and Ranging Systems for Urban Intelligent Mobile Autonomous Vehicle (UITM-AV1) | KPT | RM 79,900.
1. A Lightweight Emotion Recognition Engine for M-health Applications | University Grant |35,000.

## **AWARD and MEDAL**

1. BESTARI 2024 – High impact journal publication award Q1 & Q2
2. BESTARI 2024 – International grant recipient
3. BESTARI 2024 – Ministry of higher education grant recipient
4. SILVER – ECONDAVE 2024 – Title: A Computer Science Research Project Exploration, Formulation and Completion for Proposal
5. BESTARI 2023 – Anugerah Penulis Artikel Jurnal Scopus / WOS melebihi KPI penerbitan
6. BESTARI 2023 – Anugerah Penulis Artikel Prosiding Scopus / WOS melebihi KPI penerbitan
7. SILVER – IINDEX 2023 –Sustainable GIG System
8. PERSAMA 2022 – Practical Digital Image Processing with Matlab
9. BEST PAPER AWARD ICONDA SABAH 2022
10. ANUGERAH INOVASI DAN PENGKOMERSILAN FSKM 2021
11. 5-Star Award RIG (DIGITAL IMAGE, AUDIO & SPEECH TECHNOLOGY (DIAST) 2021
12. BEST PAPER AWARD International Power Engineering Optimization And Computing Conference 2020
13. BEST PAPER AWARD CSSR International Conference On Science And Social Research 2020
14. ANUGERAH PERSAMA 2020 – Digital Image Processing
15. SILVER-IINDEX 2019 – Klik and Kira Kalori
16. BRONZE-IINDEX 2019 – NeuroSmartBin
17. OUTSTANDING RESEARCHER AWARD RAECAS LANGKAWI 2019
18. ANUGERAH TOKOH PENYELIDIK BERPOTENSI PPSK 2019
19. GOLD-JAMSCIIX 2017- Voice for Wheelchair Movement
20. SILVER ECONDAVE 2017 – Speech Recognition Technology
21. BRONZE -IINDEX 2016 – Filled Pause Detection for Speech Assessment
22. BEST PAPER AWARD International Conference on Future Generation Communication and Networking KOREA 2012
23. BEST PRESENTER AWARD International Conference on Future Generation Communication and Networking KOREA 2012

## **SUBJECTS**

1. Image Processing CSC566
2. Operating System CSC520
3. Computer Graphics CSC658
4. Project CSP650
5. Discrete Structure CSC510
6. Software Engineering CSC577
7. Project Formulation CSP600
8. Human Computer Interaction CSC520
9. Introduction to Internet of Things LTE331

## **INTELLECTUAL PROPERTY**

1. Smart Urban Farming For Vegetables Sensors Data Collection-CRLY2022W00202 - October 2021
2. Adaptive E-appointment Mobile Applications System Using Mathematical Probability- CRLY00011784 – April 2017
3. Mobile Application For Task Scheduling Generated To Student Via Indexing Scheme – CRLY00011966 – April 2017
4. Toddler Pronunciation Detection Using Neural Network – CRLY00014222 – March 2017
5. Detection of Waste Material Using Region-based Convolution Neural Network – CRLY00020819 – 10 February 2020
6. Trademark – 2024024295 – 13 August 2024

## **ACADEMIC AND ADMINISTRATION EXPERIENCE**

1. Coordinator - Research Ethics and Integrity UiTM Cawangan Melaka | 2022- 2026
2. Deputy Chairman – Jawatankuasa Penilaian Etika UiTM Cawangan Melaka | 2024- 2026
3. Technical Program Committee- International Conference on Informatics Education and Computer Technology Application | 2025-2026
4. Conference Committee – IEEE International Conference on Signal and Image Processing Society Malaysia | 2025-2026
5. Project Leader – Seminar Recycle for a Better Future | 2025
6. Leader of Technical Team- MICEST |2025
7. Emcee - Empowering Kolej Al- Quran Sayyidina Ali (KAQSA) Community with Digital Skill| 2025
8. Coordinator - MOU ceremony UiTM- SWM Sdn Bhd | 2025
9. Leader of Registration Team - Minggu Sains Negara | 2024
10. Secretariat – i- JaMCSIX -2024
11. Secretariate – Bengkel Semakan Kurikulum DEPPP | 2023
12. Coordinator - KPT- PACE FSKM UiTM Shah Alam | 2019-2022
13. Taskforce – Kuala Lumpur International Motorshow – UiTM AV | 2018
14. Technical Secretariat – Majlis Pelancaran Autonomous Vehicle (UiTM AV1) | 2018
15. Secretary – Fun with Programming- | 2017
16. Secretariat – Tutorial and Clinic for Postgraduate FSKM | 2016

## **CONSULTATION**

1. Mentor – Mentor Mentee Penulisan dan Penerbitan Fasa 1 dan 2 | 2025
2. Invited Speaker – IEEE Symposium on Acoustic Speech and Signal Processing (SASSP) | 2025
3. Facilitator – Empowering Kolej Al- Quran Sayyidina Ali (KAQSA) Community with Digital Skill | 2025
4. Facilitator – Program Pembangunan Bakat Data Analitik: Data Analysis with Python (Datacamp Siri 11) | 2025
5. Speaker – 2 Days Bootcamp Writing on Scopus-indexed Journal UiTM Cawangan Melaka |2024
6. Session Chair – I2CACIS 9<sup>th</sup> International Conference on Automatic Control and Intelligent Systems | 2024
7. Presenter – I2CACIS 9th International Conference on Automatic Control and Intelligent Systems | 2024
8. Speaker & Trainer – ICT Short Course & Professional Certification Big Data Analytic | 2022
9. Resource Person – Image Processing CSC566 | 2020-2024
10. Resource Person – Introduction to Internet of Things LTE331 | 2024-2026
11. Guest Speaker – Collaborative Teaching Project between Campus |2023
12. Speaker – Knowledge Transfer and Social Innovation Engagement UiTM Melaka and SK Sungai Buloh | 2023
13. Speaker – Knowledge Transfer and Social Innovation Engagement UiTM Melaka and SK Merlimau Dua | 2023
14. Speaker – Knowledge Transfer and Social Innovation Engagement UiTM Melaka and SK Ayer Merbau | 2023
15. Speaker – Knowledge Transfer and Social Innovation Engagement UiTM Melaka and SK SJKC Pay Chiao | 2023
16. Panellist – World Standards Day | 2021
17. Speaker – Taklimat Geran Malaysian Technical Standards Forum Berhad | 2020

## **CONSULTATION**

18. Linguist Consultant – Artificial Solution Scandinavia | 2020
19. PHD Mock Viva Panel- Bipartite Network Approach in Modelling the Preferred Habitat of Stingless Bees | 2025
20. PHD Mock Viva Panel – Hyperparameter tuning via non-Dominated Sorting Genetic Algorithm in the Deep Learning Model from Multi-Objective Perspective | 2025
21. PHD Mock Viva Panel – Visual Target Tracking Algorithm based on Hybrid Saliency
22. Masters Mock Viva Panel – Enhancement of confidence-based Assessment Model Through Ensemble Learning Approach | 2024
23. Master Mock Viva Panel – Image Detection for Monitoring Soft Shell Crab Moulting Using Internet of Things |2024
24. DRP Panel – Research on Bee Colony Behavior Based on Multimodal Data | 2025
25. DRP Panel – Research on Automatic Generation of Chinese Text Abstract Based on Deep Learning | 2023
26. DRP Panel – Temporal Context-Based Multi-modal Emotion Recognition Model | 2023
27. DRP Panel – An Outlier Pattern Analysis To Forecast The Level Of Air Quality Index Based on the Digital Images | 2022
28. DRP Panel – Deep Convolution Feature Reconstruction Algorithm for Detecting Anomaly in Chest X-Ray Images | 2021
29. DRP Panel – Optimal Multi-scale Module In Deep Semantic Segmentation Networks For Medical Image Applications | 2021
30. DRP Panel – A Descriptive-semantic Technique For Malaysia’s Island Sentiment Analysis Based on Youtube Reviews | 2021
31. High-Indexed Journal Peer Review :
  - 3 articles IEEE Access
  - 2 articles IEEE Transactions on Multimedia
  - 1 Transaction on Consumer Electronics
  - 2 Advanced Science
  - 1 IEEE Communication Letters

## **RESEARCH WORK and MEMBERSHIP**

1. Leader of Special Interest Group (SIG) UiTM Melaka
2. Leader For Research Collaboration with Universitas Pendidikan Indonesia – 2024-2025
3. Smart Personalized Autism Collaborative Education System (Spaces) – Person in Charge for Chatbot Development
4. Graduate Engineer – G1213031A, Electronic
5. IEEE Malaysia Section Membership – 98108888
6. NASOM Ordinary Member – OM3134

## **SUPERVISION (Completed)**

### **PhD by research**

1. Li Ang. Title: A Novel Hybrid Attention Mechanism-based Neural Network for Small-sized Solder Joint Defect Detection. Main Supervisor. PHD Award: *Completed Graduate On Time* | 2025.
2. Gao Yousheng. Title: Modified Spectral Clustering Algorithm For Semi-Supervised Face Annotation Modeling. Main Supervisor | Session 1 2022/2023 | PHD Award: *Completed Graduate On Time* :2025

### **Master’s by coursework**

1. Mohd Arief Bin Sohaimi, Title: Evaluation of Dataset Using Dataset Metamodel-Completed. Role: Main supervisor | 2019.
2. Adamu Jibril, Title: Enhancement of Nigerian Traditional Medical Record : Role: Main supervisor | 2019.
3. Noor Aisyah Binti Zakaria, Title: Clustering of IoT data . Role: Main supervisor | 2021.

4. Nur Amiza Binti Mohd Supian, Title: Automated Smoking Cessation Pattern Development through Information Retrieval. Role: Main supervisor | 2017.
5. Mohd Hafiz Bin Rosli, Title: Emotion Classification of Spontaneous Speech. Role: Main supervisor | 2016.

## **SUPERVISION (Ongoing)**

1. Nur Nadiah Asyikin Binti Samruzlan . Title: Robust Face Annotation Model Through Modified Label Propagation Algorithm by Integrating Shared Nearest Neighbor and Kernel-based Similarity. Main Supervisor |Session 2 2024/2025 | Master.
2. Li Guoqin. Title: Automatic Segmentation Algorithm of Multi-atlas Medical Images Based On Model Optimization Co-Supervisor | Session 2 2020/2021 | PHD. – *Viva*
3. Zhang Dongqi. Title: Research on Concept Drift Detection for Big Data Co-Supervisor | Session 1 2021/2022 | PHD. - *Submitted*
6. Qiu Ruiyun. Title: Research on Partial Multi-view Clustering Based on Sparse Embedding Framework. Co-Supervisor | Session 2 2020/2021 | PHD. -*Viva*
7. Nasibah Husna Binti Mohd Kadir. Title: Enhancing Workforce Dynamics: An Algorithmic Approach To Employee Rotation Optimization In Human Resource Management at Jabatan Pendidikan Politeknik dan Kolej Komuniti (JPPKK) Malaysia. Co-Supervisor | Session 2 2023/2024 | PHD.
8. Nur Farhana Binti Noordin. Title: Determinants of Financial Literacy Among Persons with Disabilities: Personalized Financial Education as A Mediating Role. Co-Supervisor | Session 1 2024/2025 | PHD.
9. Shahira Binti Hj Abdul Jabar. Title: Antecedents of Philanthropic Behaviour Among UiTM Alumni Towards UiTM Education Waqf Fund. Co-Supervisor | Session 2 2023/2024 | PHD.
10. Zhang Minghui. Title: A Method of Line Situation Analysis Based on Multi-data Sets. Co-Supervisor | Session 2 2020/2021 | PHD.

## **UNDERGRADUATE FINAL YEAR PROJECT (Completed)**

1. Amni Munira Binti Khidir. Title: i-FishCheck: A two-stage Deep Learning-based Mobile System for Fish Freshness Classification using Yolov8 and TLMobilentv2 with CNN | 2025.
2. Ashraf Bin Suhaile. Title: Real-Time emotion Classification in autistic Children using Deep Learning for Therapy Assistant | 2025.
3. Haznidah Binti Aspa. Title: Real-time Detection and Classification of Parcel Damage Status using Yolov8 | 2025.
4. Siti Fatin Rudhiah Binti Yusrin. Title: Real-Time Gesture of Malaysian Sign Language (BIM) Salutation Recognition | 2024.
5. Nik Syazwan Bin Nik Kamal Bahshah. Title: Real-time German Traffic Sign Detection And Recognition Using Enhanced Convolutional Neural Networks| 2024. *Award: Best Project*
6. Muhammad Nur Iman Ideris. Title: Pawsome: Your Ultimate Dog Software application | 2024.
7. Nur Hasya Rushaida Binti Kamarulasri. Title: Face Recognition For Visitor Management System In UITM Jasin Using Deep Learning Architecture |2023.
8. Siti Nahirah Binti Asmawi. Grade 1 Braille Recognition using Deep Learning | 2023.
9. Nurul Izzah Binti Mohd Sandusi. Title: Real-time Face Recognition for UITM Jasin Student Attendance System using Machine Learning | 2023.
10. Syakir Zufayri Bin Azhar. Title: Web-Based Recyclable and Non-Recyclable Waste Detection System using CNN | 2022.
11. Muhammad Hisyamuddin Bin Hashim. Title: Web-based Intelligent waste sorting system based on texture using deep learning| 2022.
12. Noor Affieyka Natasha Binti Ahamad. Title: Waste Sorting System Using Deep Learning for Recyclable Materials (Mobile Apps)| 2022.
13. Rabiatul Athirah Binti Azman. Title: Web-Based Waste Sorting System Using Deep Learning for Recyclable Materials| 2022.
14. Jamilin Rashida Azizan. Title: Fast-NeuroSmartBin: Waste Material Classification Using Region-Based Convolutional Neural Network| 2021.

# **PUBLICATION (Corresponding/ UiTM Main Author)**

## **Web of Science-Indexed Journal**

1. Li, Ang, **Raseeda Hamzah**, and Suraya Abu Bakar. "A lightweight solder joint defect detection network combined with enhanced residual Mamba." *Measurement* (2025): 118340. – WOS Q1
2. Li, Ang, **Raseeda Hamzah**, and Siti Khatijah Nor Abdu Rahim. "A chip X-ray image bubble defect detection model combined with Dual-Former attention mechanism." *Measurement* 248 (2025): 116871. – WOS Q1
3. Li, Ang, **Raseeda Hamzah**, and Yousheng Gao. "Underwater Sonar Image Targets Detection Based on Improved RT-DETR." *IEEE Geoscience and Remote Sensing Letters* (2025). WOS Q1
4. Li, Ang, **Raseeda Hamzah**, Siti Khatijah Nor Abdul Rahim, and Yousheng Gao. "YOLO algorithm with hybrid attention feature pyramid network for solder joint defect detection." *IEEE Transactions on Components, Packaging and Manufacturing Technology* 14, no. 8 (2024): 1493-1500. WOS Q2
5. Gao Yousheng, **Raseeda Hamzah**, Li Ang, Nurbaity Sabri. "Robust Face Classification Under Pose, Lighting, and Occlusion Challenges: Friends As Testbed." *Signal, Image and Video Processing*. <https://doi.org/10.1007/s11760-025-04925-8>. (2025) WOS Q3
6. LI, Guo-QIN, Nursuriati Jamil, and **Raseeda Hamzah**. "Semi-Supervised Learning Using Co-Generative Adversarial Network (Co-GAN) for Medical Image Segmentation." *Journal of Information Science & Engineering* 40, no. 5 (2024). WOS Q4

## **Scopus-Indexed Journal**

1. **Raseeda Hamzah**, Nursuriati Jamil, Nor Diana Ahmad, Syed Mohd Zahid Syed Zainal Ariffin. "Convolutional neural network modelling for autistic individualized education chatbot." *IAES International Journal of Artificial Intelligence (IJ-AI)*, [S.I.], 14, no 1, p. 109-118, ISSN 2252-8938. (2025).
2. Gao Yousheng, Siti Khatijah Nor Abdul Rahim, **Raseeda Hamzah**, Li Ang, Raihah Aminuddin. "Semi-supervised spectral clustering using shared nearest neighbor for data with different shape and density". *IAES International Journal of Artificial Intelligence (IJ-AI)*, [S.I.], 13, no. 2, p. 2283-2290. ISSN 2252-8938. (2024)
3. Li Ang, **Raseeda Hamzah**, Siti Khatijah Nor, Abdul Rahim, Yousheng Gao, Khyrina Airin Fariza and Abu Samah. "CSSD-YOLO: A Modified YOLOv5 Method for Solder Joint Defect Detection." *Journal of Advanced Research in Applied Sciences and Engineering Technology* (2023)
4. Abdullah, Yang Muhammad Putra, Suraya Abu Bakar, Wan Nural Jawahir Hj Wan Yussof, **Raseeda Hamzah**, Rahayu A. Hamid, and Deni Satria. "A comparative study of image retrieval algorithm in medical imaging." *JOIV: International Journal on Informatics Visualization* 8, no. 3-2 (2024): 1567-1572.
5. **Raseeda Hamzah**, Khyrina Airin Fariza Abu Samah, Muhammad Faiz Abdullah, and Sharifalillah Nordin, "Investigation of RGB to HSI conversion methods for early plant disease detection using hierarchical synthesis convolutional neural networks." *JOIV: International Journal on Informatics Visualization* 6, no. 1 1-5. (2022).
6. **Raseeda Hamzah**., Jamil, N., Rahim, N., S. K. N. A., Asmuei, A. R., Mushaimi, M. A., M. Noor, H. M., Hamzah, H.A., Samah, K.A.F.A. : A Self-healing Data Management Architecture for IOT Applications: A Case Study of Smart Urban Farming on High-rise Buildings. *International Journal of Emerging Trends in Engineering Research*, 8, 1, (2020): 137-141.
7. **Raseeda Hamzah**., Supian, A., Jamil, N., Roslan, R. Automated Smoking Cessation Pattern Development Through Information Retrieval. *International Journal of Advanced Trends in Computer Science and Engineering*, 9, 1, (2020): 483-489.
8. **Raseeda Hamzah**., Jamil, N., Rosniza Roslan, R. "Development of Acoustical Feature-Based Classifier Using Decision Fusion Technique for Malay Language Disfluencies Classification", *Indonesian Journal of Electrical Engineering and Computer Science*., 8, 1, (2017) : 262-267.
9. Adamu, Jibril, **Raseeda Hamzah**, and Marshima Mohd Rosli. "Security issues and framework of electronic medical record: A review." *Bulletin of Electrical Engineering and Informatics* 9, no. 2 (2020): 565-572.

## **Mycite - Indexed Journal**

1. **Raseeda Hamzah**, and Nursuriati Jamil. "Investigation of speech disfluencies classification on different threshold selection techniques using energy feature extraction." *Malaysian Journal of Computing (MJoC)* 4, no. 1 (2019): 178-192.

# **PUBLICATION (Co- Author)**

## **WOS / Scopus-indexed journal**

1. Li, G., Jamil, N., & **Raseeda Hamzah**. (2023). An Improved Co-Training and Generative Adversarial Network (Diff-CoGAN) for Semi-Supervised Medical Image Segmentation. *Information*, 14(3), 190. WOS Q1
2. Ibrahim, S., Samah, K. A. F. A., **Raseeda Hamzah**., Ali, N. A. M., & Aminuddin, R. (2023). Substantial adaptive artificial bee colony algorithm implementation for glioblastoma detection. *IAES International Journal of Artificial Intelligence*, 12(1), 443. Scopus
3. Amerudin, M. N. I. M., Rahim, S.K. N. A, Omar, N, Sulaiman, M. S., Jaafar, A. H., **Raseeda Hamzah**.(2022). Dynamic domain transformation resource scheduling approach: water irrigation scheduling for urban farming. *International Journal of Artificial Intelligence (IJ-AI)*, ISSN: 2252-8938, DOI:10.11591/ijai.v11.i2.pp624-631
4. Abu Samah, K. A. F., **Raseeda Hamzah**., Abu Mangshor, N. N., Riza, L. S., & Noor, N. M. (2021). Visualizing sharia law: an information retrieval approach based on key extraction algorithm. *International Journal of Nonlinear Analysis and Applications*, 12, 981-996.
5. Samah, K. A. F. A., Azam, N. A., **Raseeda Hamzah**., Chew, C. S., & Riza, L. S. (2021). Optimizing Smartphone Recommendation System through Adaptation of Genetic Algorithm and Progressive Web Application. *International Journal of Advanced Computer Science and Applications*, 12(12).
6. Jamil, N., Fadhil, M. H. M., **Raseeda Hamzah**., & Ramli, M. I. (2021). Comparing MobileNet-SSD and YOLO v3 Learning Architecture for Real-time Driver's Fatigue Detection. *International Journal of Academic Research in Business and Social Sciences*, 11(12), 2538–2549.
7. Shuhaimi, F. N., Jamil, N., & **Raseeda Hamzah**. (2020). Evaluations of Internet of Things-based personal smart farming system for residential apartments. *Bulletin of Electrical Engineering and Informatics*, 9(6), 2477-2483.
8. Sabri, N., **Raseeda Hamzah**., Ibrahim, S., & Samah, K. A. F. A. (2020). COVID-19 detection for chest X-ray images using local binary pattern. *International Journal of Emerging Trends in Engineering Research*, 8(1).
9. Halim, A.H. A., Samah, K.a.f.a., Ibrahim,Z., **Raseeda Hamzah**. (2020). Conceptual Framework for Intelligent Indoor Evacuation Model Assessment Algorithm Using Integrated Assessment Model. *International Journal of Advanced Trends in Computer Science and Engineering*,9,1,289-29
10. Azri, A. M., Abdul-Rahman, S., **Raseeda Hamzah**., Abd Aziz, Z., & Bakar, N. A. (2020). Visual analytics of 3D LiDAR point clouds in robotics operating systems. *Bulletin of Electrical Engineering and Informatics*, 9(2), 492-499. (Scopus Q2)
11. Jamil, N., Roslan, S.R., Roslan, **Raseeda Hamzah**., Ramli, M. I. (2019). Food Recognition of Malaysian Meals for The Management of Calorie Intake. *International Journal of Advanced Trends in Computer Science and Engineering*, 8(1.6), 2019, 355 – 360
12. Samah, K.a.f.a, R. Roslan, **Raseeda Hamzah**. Sabri, N., Mangshor, N.N. (2019). Brute Force Algorithm Implementation for Traveljoy Travelling Recommendation System. *Indonesian Journal of Electrical Engineering and Computer Science*,16,2,401-408.
13. Abdul-Rahman, S., Abd Razak, M. S., Mushin, A. M., **Raseeda Hamzah**., Bakar, N. A., & Abd Aziz, Z. (2019). Simulation of simultaneous localization and mapping using point cloud data. *Indones. J. Electr. Eng. Comput. Sci*, 14(2), 1-10.
14. Saad, M. M., Jamil, N., & **Raseeda Hamzah**. (2018). Evaluation of support vector machine and decision tree for emotion recognition of Malay folklores. *Bulletin of Electrical Engineering and Informatics*, 7(3), 479-486.
15. Jamil, N., Almisreb, A. A., Ariffin, S. M. Z. S. Z., Din, N. M., & **Raseeda Hamzah**. (2018). Can Convolutional Neural Network (CNN) Triumph In Ear Recognition Of Uniform Illumination Invariant? *Indonesian Journal of Electrical Engineering and Computer Science*, 11(2), 558-66. Scopus Q2
16. Ramli, I., Jamil, N., Ardi, N., & **Raseeda Hamzah**. (2018). Emolah: A Malay Language Spontaneous Speech Emotion Recognition on iOS Platform. *International Journal of Engineering & Technology*, 7(3.15), 151-156.
17. Takleh, T. T. O., Bakar, N. A., Rahman, S. A., **Raseeda Hamzah**., & Aziz, Z. A. (2018). A brief survey on SLAM methods in autonomous vehicles. *International Journal of Engineering & Technology*, 7(4), 38-43

## **PUBLICATION (Corresponding/ UiTM Main Author)**

### **Conference proceedings-WOS/Scopus indexed**

1. **Raseeda Hamzah**, Li Ang, Rosniza Roslan, Noor Hasimah Ibrahim Teo, Khairunnisa Abdul Samad, and Khyrina Airin Fariza Abu Samah. "Comparing modified Yolo V5 and Faster Regional Convolutional Neural Network performance for Recycle Waste Classification." In 2024 IEEE International Conference on Automatic Control and Intelligent Systems (I2CACIS), pp. 415-419. IEEE, 2024.
2. Li, Guo-qin, Nursuriati Jamil, and **Raseeda Hamzah**, "Leveraging Unlabeled Data Using Semi-Supervised Generative Adversarial Network for Medical Image Segmentation," 2022 International Conference on Computer and Drone Applications (IConDA), Kuching, Malaysia, 2022, pp. 67-72, doi: 10.1109/ICONDA56696.2022.10000292.
3. Rashida, Jamilin, **Raseeda Hamzah**, Khyrina Airin Fariza Abu Samah, and Shafaf Ibrahim. "Implementation of faster region-based convolutional neural network for waste type classification." In 2022 International Conference on Computer and Drone Applications (IConDA), pp. 125-130. IEEE, 2022.
4. **Raseeda Hamzah**, Nursuriati Jamil, Khyrina Airin Fariza Abu Samah, Nur Nabilah Abu Mangshor, Nurbaity Sabri, and Rosniza Roslan. "Comparing statistical classifiers for emotion classification." In 2017 7th IEEE International Conference on System Engineering and Technology (ICSET), pp. 183-188. IEEE, 2017.
5. **Raseeda Hamzah**, Nursuriati Jamil, Noraini Seman, Norizah Ardi, and Shyamala C. Doraisamy. "Impact of acoustical voice activity detection on spontaneous filled pause classification." In 2014 IEEE Conference on Open Systems (ICOS), pp. 1-6. IEEE, 2014.
6. **Raseeda Hamzah**, Nursuriati Jamil, and Noraini Seman. "Filled pause classification using energy-boosted mel-frequency cepstrum coefficients." In The 8th International Conference on Robotic, Vision, Signal Processing & Power Applications: Innovation Excellence Towards Humanistic Technology, pp. 311-319. Singapore: Springer Singapore, 2014.
7. **Raseeda Hamzah**, Nursuriati Jamil, and Noraini Seman. "Nurturing Filled Pause Detection for Spontaneous Speech Retrieval." In Asia information retrieval symposium, pp. 458-469. Cham: Springer International Publishing, 2014.
8. **Raseeda Hamzah**, Nursuriati Jamil, and Noraini Seman. "Acoustical analysis of filled pause in Malay spontaneous speech." In International Conference on Future Generation Communication and Networking, pp. 251-259. Berlin, Heidelberg: Springer Berlin Heidelberg, 2012.

## **PUBLICATION (Co-Author)**

### **WOS/Scopus-indexed journal**

1. Zhang, Dongqi, Zainura Idrus, and **Raseeda Hamzah**. "Concept Drift Early Fault Detection in Wind Turbine Based on Distance Metric: A Systematic Literature Review." *Pertanika Journal of Science & Technology* 33, no. 1 (2025).
2. Yousheng, G., **Raseeda Hamzah**., Rahim, S. K. N. A., Aminuddin, R., & Li, A. (2024). Label Propagation Algorithm for Face Clustering using Shared Nearest Neighbor Similarity. *Engineering, Technology & Applied Science Research*, 14(6), 18655-18661.
3. Samah, K. A. F. A., Nur Shahirah Jailani, **Raseeda Hamzah**, Raihah Aminuddin, Nor Afirdaus Zainal Abidin, and Lala Septem Riza. "Aspect-based classification and visualization of Twitter sentiment analysis towards online food delivery services in Malaysia." *Journal of Advanced Research in Applied Sciences and Engineering Technology* 37, no. 1 (2024): 139-150.
4. Ahmad, Khaizie Sazimah, Khairunnisa Abd Samad, Nur Hayati Abd Rahman, Siti Nurazira Mohd Daud, Najihah Hanisah Marmaya, Yenni Samri Juliati Nasution, and **Raseeda Hamzah**. "Policies Improving the Well-Being of Gig Workers in Malaysia." *Information Management and Business Review* 16, no. 1 (2024): 182-189.

## **Mycite-indexed journal**

1. Ruiyun, Q., Rahim, S. K. N. A., Jamil, N., **Raseeda Hamzah.**, & Xiaoling, F. Osteoarthritis grading: a synthesized magnetic resonance images technique. *Malaysian Journal of Computing*, 9(2), (2024),1944-1954.

## **PUBLICATION (Co-Author)**

### **Conference proceedings**

1. Abu, Z., Zarawi, S. N. A. Z. M., Aminuddin, R., Sabri, N., **Raseeda Hamzah.**, & Sheng, C. C. (2024, December). Adaptation of YOLOv8n for Underwater Object Detection System. In *2024 IEEE 12th Conference on Systems, Process & Control (ICSPC)* (pp. 71-76). IEEE, 2024.
2. Rastari, M. A. M., Roslan, **Raseeda Hamzah**, R., Teo, N. H. I., Shahbudin, F. E., & Samah, K. A. F. A. (2024, August). Recycle waste detection and classification model using YOLO-V8 for real-time waste management. In *2024 IEEE International Conference on Artificial Intelligence in Engineering and Technology (IICAET)* (pp. 372-377). IEEE, 2024.
3. Azhar, N. Z. B., Teo, N. H. I., **Raseeda Hamzah.**, binti Roslan, R., & Maskat, R. (2024, September). A Hybrid ResNet—MobileNet Deep Learning Model for Smart Bin Waste Classification. In *2024 5th International Conference on Artificial Intelligence and Data Sciences (AiDAS)* (pp. 356-362). IEEE,2024.
4. Istihat, Nur Nazirah, Noor Hasimah Ibrahim Teo, Rosniza Roslan, **Raseeda Hamzah**, Fadilah Ezlina Shahbudin, and Mohd Suffian Sulaiman. "iSWMbot: Chatbot with an Intent Classification Model using Supervised Algorithm." In *2024 IEEE 6th Symposium on Computers & Informatics (ISCI)*, pp. 194-199. IEEE, 2024.
5. Yazid, M. N. A., Abidin, N. A. Z., Aminuddin, R., Ibrahim, A. Z. M., Teo, N. H. I., Nasir, S. D. N. M., ... & Samah, K. A. F. A. **Raseeda Hamzah** (2023, July). Convolutional Neural Network Object Detection Algorithm for Identifying Species of Panthera. In *2023 IEEE Symposium on Industrial Electronics & Applications (ISIEA)* (pp. 1-6). IEEE, 2023
6. Roslan, R., Nazery, N. A., Jamil, N., & **Raseeda Hamzah**. (2017, October). Color-based bird image classification using Support Vector Machine. In *2017 IEEE 6th Global Conference on Consumer Electronics (GCCE)* (pp. 1-5). IEEE, 2017.
7. Sabri, N., Kamarudin, M. F., **Raseeda Hamzah**, Manghsor, N. N. A., Samah, K. A. F. A., & Hasan, N. (2019, October). Combination of color, shape, and texture features for orchid classification. In *2019 IEEE 9th International Conference on System Engineering and Technology (ICSET)* (pp. 315-319). IEEE, 2019.
8. Jamil, N., Apandi, F., & **Raseeda Hamzah**. (2017, July). Influences of age in emotion recognition of spontaneous speech: A case of an under-resourced language. In *2017 International Conference on Speech Technology and Human-Computer Dialogue (SpeD)* (pp. 1-6). IEEE, 2017.
9. Tamil, E. M., **Raseeda Hamzah.**, Idris, M. Y. I., & Tamil, A. M. (2008). Feature extraction for biosignal processing (Part IV: electrogastrogram) using HHT. In *4th Kuala Lumpur International Conference on Biomedical Engineering 2008: BIOMED 2008 25–28 June 2008 Kuala Lumpur, Malaysia* (pp. 195-198). Berlin, Heidelberg: Springer Berlin Heidelberg, 2008.

### **Book**

1. Jamil, N., Awang, K., Ibrahim, Z., Sabri, N., Roslan, R., Mangshor, N.N.A., **Raseeda Hamzah**. (2019). *Practical Digital Image Processing With Matlab Second Edition*, Penerbit Press Universiti Teknologi Mara