

Mustafa Muwafak Alobaedy

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[LinkedIn](#) · [ResearchGate](#) · [Google Scholar](#) · [Scopus](#) · [ORCID](#) · [Publons](#) · [Udemy](#) · [YouTube](#)

Academic Positions

- **Assistant Professor · Faculty of Computing and Informatics, Multimedia University** — Jul 2025 – Present
- **Associate Professor · Faculty of Information and Technology, City University Malaysia** — Jan 2024 – May 2025
- **Head of Program (Master of IT) · City University Malaysia** — Sep 2023 – May 2025
- **Internal Evaluation Panel (IEP) Member for FRGS 2025 · City University Malaysia** — Dec 2024 – Dec 2025
- **Senior Lecturer · City University Malaysia** — Jan 2023 – Dec 2023
- **Senior Lecturer · School of Information & Communication Technology, HELP University** — Aug 2019 – Jan 2022
- **Visiting Senior Lecturer · School of Computing, Universiti Utara Malaysia (UUM)** — Oct 2015 – Mar 2018
- **Research Assistant · School of Computing, UUM** — May 2013 – Oct 2014
- **Research Assistant · School of Computing, UUM** — Nov 2011 – Aug 2012
- **Research Fellow & Facilitator · Uniutama Solution Sdn. Bhd. (formerly R&D SerindIT Com), UUM** — Oct 2010 – Jun 2013

Roles & Responsibilities

Associate Professor

Teaching, supervision, research, and student mentorship.

Head of Program, Master of Information Technology (HOP-MIT)

- **Program Development** — Designed programs aligned with MQA standards, addressing industry needs.
- **Program Enhancement** — Reviewed and updated curriculum to maintain MQA compliance and reflect emerging trends.
- **Course File Management** — Oversaw preparation and organization of course files per institutional and regulatory standards.
- **Compliance Preparation** — Coordinated MQA audits and visits; compiled quality evidence and outcomes alignment.
- **Quality Assurance** — Ensured best practices in teaching, learning, assessment, and accreditation benchmarks.
- **Faculty Coordination** — Collaborated with lecturers to ensure seamless course delivery and compliance.

Academic Qualifications

- **PhD in Computer Science** — Universiti Utara Malaysia (2011–2015). *Thesis: Hybrid Ant Colony System Algorithm for Static and Dynamic Job Scheduling in Grid Computing.* [Thesis link](#)
- **MSc in Intelligent Systems** — Universiti Utara Malaysia (2008–2010). *Project: Text Extraction Algorithm for Web Text Classification.* [Thesis link](#)
- **BSc in Information Technology** — Sikkim Manipal University, India (2005–2008)

Teaching Experience

Postgraduate

- Data Mining with Python (MIT) — City University Malaysia
- Advanced Database Management System (MIT) — City University Malaysia
- Research Methods (MIT & PhD IT) — City University Malaysia
- Master Project (MIT) — City University Malaysia
- Knowledge Management System — City University Malaysia
- Research Methods (Master of Data Science) — HELP University
- Advanced System Analysis and Design — UUM
- Neural Networks — UUM
- Computer Systems and Network — UUM

Undergraduate

- Social Media Computing — Multimedia University
- Machine Learning — Multimedia University
- Research Methodology in Computer Science — Multimedia University
- Algorithm and Complexity — City University Malaysia
- Artificial Intelligence — City University Malaysia
- Internet of Things — HELP University
- Mobile Technology Mini Project — HELP University
- Mobile Application Development (Flutter & Dart) — HELP University
- Introduction to Mobile Apps (Android Studio & Java) — HELP University
- Mobile Development (Xamarin & C#) — HELP University
- Blockchain Development (JavaScript) — HELP University
- Statistics and Visualization (SAS) — HELP University
- Introduction to Programming (Python) — HELP University
- Introduction to IT (App Inventor 2) — HELP University
- Statistics for Information Technology — UUM
- Mathematics for Information Technology — UUM

Online Courses (Instructor)

- **Udemy Instructor** — [View all my courses on Udemy](#)

YouTube Channel

- **@mustafamuwafakalobaedy** — [Visit my YouTube channel](#)

Conference Management System

- **MyCMS** — [Conference management system at mycms.my](#). Submissions, peer review, program scheduling, and proceedings export for academic conferences and journals.

PhD Supervision

Graduated PhD Students

- **Sachinthani Eranga Alahakoon** — City University Malaysia (2025). *Optimization of Edge Device Workload Allocation for Wireless Body Area Network*.
- **Xiao Shixiao** — City University Malaysia (2024). *Leveraging Deep Learning and Ensemble Techniques with Long Short-Term Memory for Personality Prediction from Blog Comment Texts*.
- **Shatha Abdulhadi Muthana Shmailawi** — Universiti Utara Malaysia (2022). *Hybrid Optimization Algorithm for Power Grid*.
- **Shaymah Akram Yasear** — Universiti Utara Malaysia (2021). *Enhanced Harris's Hawk Algorithm for Continuous Multi-Objectives Optimization Problems*.

Current PhD Students (City University Malaysia)

- Daniel Joseph Foley (Viva passed 2025)
- Deng Zilong
- Shathi
- Huang Xiaocun
- Esezobo Caleb Oise
- Duan Shiming

Professional Memberships

- HRDC – TTT Certified. Certificate ID: 87748640-f4df-11ef-828d-b3265c291384
- IEEE, Malaysia Section — Member ID: 92889418
- Associate Fellow — Data Science Research LAB, School of Computing, UUM (2017–2018)

Curriculum Development

- Master of Information Technology Program — City University Malaysia
- BSC201: Blockchain Technology Concepts — HELP University
- BCS203: Blockchain Applications and Smart Contracts — HELP University
- BSC301: Blockchain Development — HELP University
- Member, Curriculum Review Committee (2016–2018) — School of Computing, UUM

Committees & Editorial / Reviewer

- Technical Committee Member — 8th International Conference on Computing and Informatics (ICOI 2021)
- Member — Internationalization Committee (2015–2018), School of Computing, UUM
- Reviewer — Journal of Engineering Science and Technology (JESTEC), 2021
- Consulting Editor — Journal of Information and Communication Technology (JICT) (2016–2018)
- Reviewer — 2nd International Conference on the Future of ASEAN (ICoFA 2017)

Intellectual Property

- **Bacadisleksia** (2016) — Reg. No.: LY2016001311
- **Jobs Scheduling Simulator (JSS)** (2016) — Reg. No.: LY2016003299
- **Robot's Voice Replay for Language and Mathematics Learning** (2017) — Reg. No.: CRLY00004447
- **ComiCulture: A Digital Comic for Culture-Aware Education** (2017) — Reg. No.: LY2017003510
- **Digital Graphic Novel Model** (2017) — Reg. No.: LY2017004455

Awards & Acknowledgements

- **Gold** (2017) — COMICULTURE: A Digital Comic for Culture-Aware Education — PECIPTA (Terengganu, Malaysia)
- **Gold** (2016) — BacaBot — PERINTIS (UNITEN, Putrajaya, Malaysia)
- **Silver** (2016) — Robot Voice Replay for Language and Mathematics Learning — ITEX (Kuala Lumpur, Malaysia)
- **Gold** (2015) — BacaDisleksia — PECIPTA (Kuala Lumpur, Malaysia)
- **Bronze** (2011) — Face Recognition using Template Matching for Remote Database Backup — Malaysia Technology Expo

Skills

- **Programming Languages:** Python, C#, Java, Dart
- **Web Design:** HTML5, JavaScript, CSS3
- **Mobile Development:** Android (Java), Xamarin (C#), MIT App Inventor 2, Flutter
- **Blockchain:** Blockchain, Cryptocurrency
- **Databases & Cloud:** MS SQL Server, SQLite, NoSQL, GCP & Firebase
- **Analytics & Tools:** SAS, Fusion 360

Research Interests

- Machine Learning
- Deep Learning
- Blockchain
- Metaheuristic Algorithms
- Software Development

Completed Research Grants

- **Creative education with people who are blind.** HELP University (2019–2021)
- **Low Cost Computing Power for Big Data Analytics Using a Raspberry Pi Cluster.** HELP University (2019–2021)
- **BacaDisleksia:** An application with face distortion to fortify reading engagement for dyslexic children. Ministry of Higher Education, Malaysia (2015–2018)
- **Hybrid ACS Algorithm for Dynamic Scheduling of Jobs in Computational Grid System.** Ministry of Higher Education, Malaysia (2013–2015)
- **Ant Colony Optimization Algorithm for Dynamic Scheduling of Jobs in Computational Grid.** Ministry of Higher Education, Malaysia (2011–2012)

Attended Workshops & Courses

- Python and Django Full Stack Web Developer Bootcamp — Udemy (2019)
- .NET Entity Framework in Depth — Udemy (2019)
- Complete Blockchain, Cryptocurrency, Wallet Development — Udemy (2018)
- Ethereum and Solidity: The Complete Developer's Guide — Udemy (2018)
- HTML5 and CSS3 — Udemy (2018)
- Deep Learning and GPU Workshop — Universiti Sains Malaysia (2016)
- Machine Learning in Computer Vision — Kuala Lumpur, Malaysia (2013)
- High Impact Article Writing Workshop — UUM (2013)
- Basic Project Management Skills Training — EDC-UUM Hotel, Kedah (2012)
- Workshop on Literature Review — UUM (2010)
- National Conference on Rural ICT Development — UUM (2009)
- Visual Basic — Computer Paradise, Mysore, India (2007)
- C#.NET Framework, ASP.NET, and WinForms — Computer Paradise, Mysore, India (2007)
- Programming in C & C++ — Computer Paradise, Mysore, India (2006)

Publications (42)

2026

1. Shiming Duan, Mustafa Muwafak Alobaedy, Mohammmd Kazem Chamran, Hafizul Othman (2026). Evaluating Mamba Model for Future Applications: A Systematic Literature Review. *International Journal of Computing and Digital Systems*.
2. Niranjala S. H., M. Kazem Chamran, Mustafa Mowafak Alobaedy (2026). Quantum Enhanced Image Analysis on IBM Hardware In NISQ-Era. *International Journal of Innovations in Science Engineering and Management*. doi:<https://doi.org/10.69968/ijisem.2026v5i2185-192>
3. Qing Guan, Mustafa Muwafak Alobaedy, Mohd Nurul Hafiz Bin Ibrahim, S. B. Goyal (2026). A Systematic Review of Privacy-Aware Cloud Framework for Medical Secure E-Governance Data Processing. *Journal of Computers Mechanical and Management*. doi:[10.57159/jcmm.5.1.25222](https://doi.org/10.57159/jcmm.5.1.25222)

2025

1. Baokui Liao, Mohd Nurul Hafiz Ibrahim, Mustafa Muwafak Alobaedy, S. B. Goyal (2025). A Multidimensional Evaluation Framework for Parallel Frequent Pattern Mining Algorithms on Big Data Platforms. *Journal of Computers, Mechanical and Management (JCMM)*, 4(5), 67–83. doi:<https://doi.org/10.57159/jcmm.4.6.25220>
2. Zilong Deng, Mustafa Muwafak Alobaedy, Mohd Nurul Hafiz, Xiaocun Huang (2025). A Blockchain-Based Framework for Secure and Interoperable Healthcare Data Management: An Empirical Study. *International Journal of Engineering Science and Information Technology*, 5(4), 538–549. doi:<https://doi.org/10.52088/ijesty.v5i4.1701>
3. Li Xu, Mohd Nurul Hafiz Bin Ibrahim, Mustafa Muwafak Alobaedy, S. B. Goyal (2025). A Systematic Review of Scalable Blockchain-Based Digital Signature Frameworks for Healthcare Data Security. *Journal of Computers, Mechanical and Management (JCMM)*, 4(6), 16–29. doi:<https://doi.org/10.57159/jcmm.4.6.25221>
4. Mustafa Muwafak Alobaedy, Xiaolin Wang, M. Kazem Chamran, Mohd Nurul Hafiz Ibrahim (2025). Performance Benchmarking of Classic Classification Algorithms on Structured Heart Disease Data. *IEEE 15th International Conference on System Engineering and Technology (ICSET)*, 370–375. doi:<https://doi.org/10.1109/ICSET65917.2025.11283672>
5. Niranjala S. H., M. Kazem Chamran, Mustafa Mowafak Alobaedy (2025). Evaluate Hybrid Classical-Quantum Architecture in Deep Image Processing. *IEEE 15th International Conference on System Engineering and Technology (ICSET)*. doi:<https://doi.org/10.1109/ICSET65917.2025.11284197>

6. Xiaocun Huang, Mustafa Muwafak Alobaedy, Mohd Nurul Hafiz Ibrahim, Ali A Khalaf (2025). Tomato Disease Classification Using Transformer-Based Deep Learning Models. *2025 IEEE 7th Symposium on Computers & Informatics (ISCI)*, 339–343. doi:<https://doi.org/10.1109/ISCI65687.2025.11166703>
7. Shiming Duan, Mustafa Muwafak Alobaedy, M. Kazem Chamran, R Shyam (2025). Developing a MAMBA-Neural Radiance Fields Model for Accurate and Efficient 3D X-Ray Image Reconstruction. *2025 IEEE 7th Symposium on Computers & Informatics (ISCI)*, 327–332. doi:<https://doi.org/10.1109/ISCI65687.2025.11167033>
8. Deng Zilong, Mustafa Muwafak Alobaedy, Mohd Nurul Hafiz Bin Ibrahim, Xiaocun Huang (2025). A Blockchain Technology Framework to Enhance Security and Interoperability of Electronic Healthcare Records. *International Journal of Academic Research in Business and Social Sciences*, 15, 1156–1170. doi:<https://dx.doi.org/10.6007/IJARB-SS/v15-i4/25319>
9. R. Shyam, G. Chiranjeevi, Mustafa Muwafak Alobaedy (2025). ML-Driven Secure Communication for Next-Generation 6G Networks. *6G Cyber Security Resilience: Trends and Challenges*, 121–145. Springer. doi:https://doi.org/10.1007/978-3-031-85008-0_6
10. Xiaocun Huang, Mustafa Muwafak Alobaedy, Yousef Fazea, S. B. Goyal, Zilong Deng (2025). Disease Infection Classification in Coconut Tree Based on an Enhanced Visual Geometry Group Model. *Processes*, 13(3), 689. doi:<https://doi.org/10.3390/pr13030689>
11. Deng Zilong, Mustafa Muwafak Alobaedy (2025). Blockchain-Based Healthcare Data Management: Analysis and Evaluation of Security, Scalability, and Compliance for Electronic Health Records (EHRs). *5th International Conference on Advances in Electrical, Electronics and Computing Technology (EECT)*, 1–7. doi:<https://doi.org/10.1109/EECT64505.2025.10966949>
12. Zilong Deng, Yizhang Wang, Mustafa Muwafak Alobaedy (2025). Federated k-means based on clusters backbone. *PLOS One*. doi:<https://doi.org/10.1371/journal.pone.0326145>

2024

1. Shyama Heshini Niranjala, Mustafa Muwafak Alobaedy, S. B. Goyal (2024). A Comparative Study of Machine Learning Techniques for Predicting Student Academic Performance. *Intelligent Computing and Optimization: Proceedings of ICO2023*, 2, 307–315. Springer. doi:https://doi.org/10.1007/978-3-031-73318-5_31
2. Yousef Fazea, Mustafa Muwafak Alobaedy, Mohamed Alsamman, Fathey Mohammed (2024). Coherence Big Data Space Division Multiplexing. *2024 International Symposium on Networks, Computers and Communications (ISNCC)*, 1–4. doi:<https://doi.org/10.1109/ISNCC62547.2024.10758969>
3. Sachinthani Alahakoon, Mustafa Muwafak Alobaedy, Yousef Fazea (2024). Conceptual Framework for the Optimization of Edge Device Workload Allocation in Wireless Body Area Networks. *2024 International Symposium on Networks, Computers and Communications (ISNCC)*, 1–5. doi:<https://doi.org/10.1109/ISNCC62547.2024.10759005>
4. Zhuoran Li, Kazem Chamran, Mustafa Muwafak Alobaedy, Muhammad Aman Sheikh, Tahir Siddiqui, Abdul Ahad (2024). An Optimization on 2D-SLAM Map Construction Algorithm Based on LiDAR. *Journal of Intelligent & Robotic Systems*, 110(4), 144. doi:<https://doi.org/10.1007/s10846-024-02123-1>
5. Shiming Duan, M. Kazem Chamran, Mustafa Muwafak Alobaedy (2024). Enhancing Blockchain Interoperability Through Cross-Chain Outsourcing and Communication. *2024 IEEE 6th Symposium on Computers & Informatics (ISCI)*, 276–281. doi:<https://doi.org/10.1109/ISCI62787.2024.10668062>
6. Xiao Shixiao, Mustafa Muwafak Alobaedy, S. B. Goyal, Chaman Verma & Veronika Stoffová (2024). Using Meta-LSTM to Predict Personality Traits from Blog User Behaviors. *Proceedings of International Conference on Recent Innovations in Computing*, 1, 497–510. Springer. doi:[10.1007/978-981-97-2839-8_34](https://doi.org/10.1007/978-981-97-2839-8_34)

2023

1. Husni, H., Jamaludin, Z., Mustafa Muwafak Alobaedy (2023). An IxD-Based Model for Digital Graphic Novels. *UUM*.
2. Xiao ShiXiao, Mustafa Muwafak Alobaedy, S. B. Goyal, Sanjay Singla, Sandeep Kang, Raman Chadha (2023). Real-time Sentiment Analysis on Social Networks using Meta-model and Machine Learning Techniques. *Journal of Scalable Computing: Practice and Experience*. doi:<https://doi.org/10.12694/scpe.v24i4.2247>

3. Renjith V. Ravi, S. B. Goyal, Xiao ShiXiao, Mustafa Muwafak Alobaedy, Vladimir Kustov (2023). Sentiment Analysis Using Lexical Approach and Fuzzy Logic. *International Conference on Mining Intelligence and Knowledge Exploration*, 117–127. Springer. doi:doi.org/10.1007/978-3-031-44084-7_12

2022

1. Andy Hickson, Leyla H. Tajer, Mustafa Muwafak Alobaedy, Edmund Joo Vin Oh (2022). Accessing and Delivering Online Education in the Time of COVID-19: Challenges for Visually Impaired People in Malaysia. *Horizon Journal of Human & Social Sciences Research (JHSSR)*, 4(1), 63–71. doi:<https://doi.org/10.37534/bp.jhssr.2022.v4.n1.id1153.p63>

2. Mustafa Muwafak Alobaedy, Ali A. Khalaf, Dr. Yousef (2022). Distributed Multi-Ant Colony System Algorithm Using Raspberry Pi Cluster for Travelling Salesman Problem. *Iraqi Journal of Science*, 4067–4078. doi:-<https://doi.org/10.24996/ijss.2022.63.9.35>

2019

1. Yousef Fazea, Mustafa Muwafak Alobaedy, Zeyid T. Ibraheem (2019). Performance of a Direct-Detection Spot Mode Division Multiplexing in Multimode Fiber. *Journal of Optical Communications*, 40(2), 161–166. doi:-<https://doi.org/10.1515/joc-2017-0135>

2018

1. Yousef Fazea, Mohd Samsu Sajat, Amran Ahmad, Mustafa Muwafak Alobaedy (2018). Channel Optimization in Mode Division Multiplexing Using Neural Networks. *2018 IEEE 14th International Colloquium on Signal Processing & Its Applications (CSPA)*, 173–175. doi:<https://doi.org/10.1109/CSPA.2018.8368707>

2017

1. Ishola D. Muraina, Mustafa Muwafak Alobaedy, Huda Haji Ibrahim (2017). A Framework for Preserving Data Integrity During Mobile Device Forensic in Open Source Software Environment. *Proceedings of FOSSC 2017*, 22–26.

2. Mustafa Muwafak Alobaedy, Ali A Khalaf, Ishola D. Muraina (2017). Analysis of the Number of Ants in Ant Colony System Algorithm. *2017 5th International Conference on Information and Communication Technology (ICoICT)*, 1–5. IEEE. doi:<https://doi.org/10.1109/ICoICT.2017.8074653>

2015

1. Mustafa Muwafak Alobaedy and Ku Ruhana Ku-Mahamud (2015). Strategic Oscillation for Exploitation and Exploration of ACS Algorithm for Job Scheduling in Static Grid Computing. *2015 Second International Conference on Computing Technology and Information Management (ICCTIM)*, 87–92. IEEE. doi:<https://doi.org/10.1109/ICCTIM.2015.7224598>

2. Mustafa Muwafak Alobaedy and Ku Ruhana Ku-Mahamud (2015). Low and High Level Hybridization of Ant Colony System and Genetic Algorithm for Job Scheduling in Grid Computing. *Proceedings of the 5th International Conference on Computing and Informatics, ICOCI 2015*. doi:<https://repo.uum.edu.my/id/eprint/15572/1/PID164.pdf>

3. Mustafa Muwafak Alobaedy (2015). Hybrid Ant Colony System Algorithm for Static and Dynamic Job Scheduling in Grid Computing. *PhD Thesis, Universiti Utara Malaysia*.

4. Mustafa Muwafak Alobaedy and Ku Ruhana Ku-Mahamud (2015). Hybrid Ant Colony System and Genetic Algorithm Approach for Scheduling of Jobs in Computational Grid. *Research Journal of Applied Sciences, Engineering and Technology*, 11(7), 806–816. doi:<https://doi.org/10.19026/rjaset.11.2044>

2014

1. Mustafa Muwafak Alobaedy and Ku Ruhana Ku-Mahamud (2014). Scheduling Jobs in Computational Grid Using Hybrid ACS and GA Approach. *2014 IEEE Computers, Communications and IT Applications Conference (CCITA)*, 223–228. doi:[10.1109/ComComAp.2014.7017200](https://doi.org/10.1109/ComComAp.2014.7017200)

2013

1. Mustafa Muwafak Alobaedy and Ku Ruhana Ku-Mahamud (2013). Ant Colony System with Heuristic Function for the Travelling Salesman Problem. *Journal of Next Generation Information Technology*, 4(2), 39–48. doi:10.4156/jnit.vol4.issue2.5

2. Ku-Mahamud, K. R., & Mustafa Muwafak Alobaedy (2013). New Heuristic Function in Ant Colony System Algorithm for Optimization. *Proceedings of Recent Advances in Mathematical Methods, Intelligent Systems and Materials (MAMECTIS 2013)*, 13–18).

2012

1. Mustafa Muwafak Alobaedy, & Ku-Mahamud, K. R. (2012). New Heuristic Function in Ant Colony System for the Travelling Salesman Problem. *2012 7th International Conference on Computing and Convergence Technology (ICCCT)*, 965–969. *IEEE*.

2. Ku Ruhaana Ku-Mahamud, Mustafa Muwafak Alobaedy (2012). New Heuristic Function in Ant Colony System for Job Scheduling in Grid Computing. *Proceedings of the 17th WSEAS international conference on applied mathematics*.

2011

1. Din, A. M., Ahmad, F., Farhan, M., Mohsin, M. F. M., Ku-Mahamud, K. R., & Mustafa Muwafak Alobaedy (2011). Face Recognition For Remote Database Backup System. *6th International Conference on Computer Sciences and Convergence Information Technology (ICCIT)*.

2010

1. Mustafa Muwafak Alobaedy (2010). Text Extraction Algorithm for Web Text Classification. *Master Project, Universiti Utara Malaysia*. doi:10.13140/rg.2.2.29447.66729

2. Mustafa Muwafak Alobaedy, Yusof, Y., & Alobaedy, M. M. (2010). Autonomous Object Movement in Modeling Bees Foraging. *ICIF*.