

CURRICULUM VITAE

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PERSONAL INFORMATION

Present Appointment: Associate Professor
School of Quantitative Sciences,
Universiti Utara Malaysia.

Chief-Editor
Journal of Computational Innovation and Analytics

Previous Appointments:

2000-2001 Production Lead: Asian Composites Manufacturing Sdn. Bhd.
Involved in production line, procurement, and logistics of Boeing Aircraft's composites part manufacturer.

1996-2000 Sales Engineer: Mecomb Engineering Sdn. Bhd.
Involved in sales, project and technical support of industrial products such as water pumps, industrial fans etc.

Qualifications:

2009 Ph.D. in Manufacturing Engineering and Operational Research,
University of Bradford, England
Thesis Title: The Development of Hybrid Knowledge-Based Collaborative Lean Manufacturing Management (CLMM) System for an Automotive Manufacturing Environment

2001 MSc. in Decision Science, Universiti Utara Malaysia
Thesis Title: Simulation Modelling of Production Planning and Control of Boeing Aircraft's Composites Parts

1996 B.Eng. in Mechanical Engineering, Universiti Malaya

Area of Expertise/Interest:

Discrete-event simulation, operational research, multi-criteria decision making, data envelopment analysis, lean manufacturing, knowledge-based systems

Citation Metrics (as of 5 November 2025)

Google Scholar		Scopus		WoS	
Citation	H-index	Citation	H-index	Citation	H-index
579	12	291	9	252	9

Here are the latest **10 Scopus-indexed journal publications**

1. Khalid, R., Mohamad Isa, M. A. M., **Nawawi, M. K.**, Mohamed Nadhar Khan, S. A., Mat Desa, W. L. H., Ramli, R., & Kucharov, R. (2025). Integrating discrete event simulation and data envelopment analysis for system performance and efficiency evaluation. *Journal of Simulation*, 19(3), 304–327. <https://doi.org/10.1080/17477778.2024.2394051>
2. Khalid, R., **Nawawi, M. K.**, Ramli, R., Ishak, N., & Sakari, N. F. (2025). A framework integrating discrete event simulation and data envelopment analysis to evaluate resource configuration performance in discrete systems. *Simulation*. Advance online publication. <https://doi.org/10.1177/00375497251337090>
3. Sulaiman, S. M., Awwal, A. M., Malik, M., Khalid, R., Benjamin, A. M., **Nawawi, M. K.**, & Madi, E. N. (2025). An efficient gradient-based algorithm with descent direction for unconstrained optimization with applications to image restoration and robotic motion control. *PeerJ Computer Science*, 11, e2783. <https://doi.org/10.7717/peerj-cs.2783>
4. Dzulkarnain, S. N. Z. H., **Nawawi, M. K.**, & Kashim, R. (2024). Developing a parallel network slack-based measure model in the occurrence of hybrid integer-valued data and uncontrollable factors. *Journal of Applied Data Sciences*, 5(4), 1790–1801. <https://doi.org/10.47738/jads.v5i4.407>
5. Sulaiman, S. M., Kaelo, P., Khalid, R., & **Nawawi, M. K.** (2024). A descent generalized RMIL spectral gradient algorithm for optimization problems. *International Journal of Applied Mathematics and Computer Science*, 34(2), 225–233. <https://doi.org/10.61822/amcs-2024-0016>
6. Mujiarto, Mohamad Ayob, A. F. M., Vaidyanathan, S., Sambas, A., Benkouider, K., **Nawawi, M. K.**, Khalid, K., & Madi, E. N. (2024). Electronic circuit in the two-scroll hyperchaotic system with a unique saddle-point rest point and its synchronization via integral sliding mode control. *IAENG International Journal of Applied Mathematics*, 54(3), 452–464.
7. Taleb, M., Khalid, R., Ramli, R., & **Nawawi, M. K.** (2023). An integrated approach of discrete event simulation and a non-radial super efficiency data envelopment analysis for performance evaluation of an emergency department. *Expert Systems with Applications*, 220, 119653. <https://doi.org/10.1016/j.eswa.2023.119653>
8. Khalid, R., Yusof, M. M., Rosli, N. C., & **Nawawi, M. K.** (2023). A decision support system for simulating and predicting the impacts of various tournament structures on tournament outcomes. *International Journal of Computer Science in Sport*, 22(1), 42–63. <https://doi.org/10.2478/ijcss-2023-0004>
9. Khalid, R., **Nawawi, M. K.**, Ishak, N., & Baten, M. A. (2023). Optimising pedestrian flow in a topological network using various pairwise speed-density models. *Operations Research and Decisions*, 33(4), 53–69. <https://doi.org/10.37190/ord230404>
10. Sambas, A., Vaidyanathan, S., Al-Azzawi, S. F., **Nawawi, M. K.**, Mohamed, M. A., Zakaria, Z. A., Abas, S. S., & Bin Mamat, M. (2023). Modelling and MultiSim simulation of a new hyperchaos system with no equilibrium point. *Nonlinear Dynamics and Systems Theory*, 23(4), 422–433.

OTHER CONTRIBUTION

1. **Dean**, School of Quantitative Sciences, UUM College of Arts and Sciences from January 2019 to December 2023.
2. **Deputy Dean**, School of Quantitative Sciences, UUM College of Arts and Sciences from January 2014 to December 2014.
 - Assisting Dean in Quality and Strategic Planning of School.
 - Monitoring the quality of postgraduate and undergraduate programs.
3. **Head of Department (Decision Science)**, School of Quantitative Sciences, UUM College of Arts and Sciences from January 2012 to December 2013.
4. **Coordinator for Undergraduate Programme (Decision Science)**, School of Quantitative Sciences, UUM College of Arts and Sciences from July 2011 to January 2012.
5. **Chairperson for Undergraduate Studies (Quantitative Sciences)**, UUM College of Arts and Sciences from June 2010 to June 2011.
6. **Coordinator for Bachelor of Decision Science Programme**, UUM College of Arts and Sciences from January 2010 to June 2010.
7. **Practicum Coordinator**, Practicum Centre (presently known as Centre of University-Industry Collaboration, CUIC) from January 2004 to October 2005.

PROFESSIONAL BODY MEMBERSHIP

1. Senior member of International Assoc. of Computer Science & Information Technology (IACSIT). 2011-present.
2. Graduate Member of Board of Engineers, Malaysia. 1997-present.
3. Malaysia TRIZ (Theory of Inventive Problem Solving, Level 2 Practitioner and Level 1 Instructor).

REFERENCES

1. Professor Dr. Mohammed Khurshid Khan
Professor of Manufacturing Systems Engineering
University of Bradford
United Kingdom
e-mail: m.k.khan@bradford.ac.uk
2. Professor Dr. Haslinda Ibrahim
Dean & Professor
School of Quantitative Sciences
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