



CURRICULUM VITAE



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Education

1. Ph.D. Engineering Design, 2020, University of Malaya.
2. Master of Engineering Science, 2013, University of Malaya.
3. B.Eng. (Manufacturing), 2010, University of Malaya.

Areas of Interest

1. Cognitive Ergonomics
2. Work design
3. Industrial Engineering
4. Transportation Ergonomics

Professional Qualification/Membership/Affiliation

1. Graduate Engineer, Board of Engineers Malaysia (BEM) (No.:73364A).
2. Graduate Member, The Institution of Engineers, Malaysia (No.: G88845)
3. Member, Human Factors and Ergonomics Society Malaysia (HFEM) (No.: 0328)
4. Ergonomic Trained Person, Department of Occupational Safety and Health, Malaysia (No.1052).
5. Competent Trainer (TTT), National Institute of Occupational Safety Health (NIOSH) Malaysia (No.: TTT126132-20)
6. Member, ModTech Professional Association (No.:364)

Appointments

Position	Duration
Universiti Putra Malaysia Senior lecturer	2021 – to date
ErgoWorks Sdn Bhd Operation Manager / Ergonomist	2020 - 2021
Universiti Malaya 1. Research associate	2012 - 2020
2. Tutor	2011 - 2012
3. Research assistant	2010 - 2011

Courses Taught

Undergraduate

Engineering Economy
Engineering Design I
Production Planning and Automation Systems
Engineering Mathematics 2
Engineering Seminar
Mechanics Of Machines

Postgraduate:

Industrial Ergonomics
Financial Analysis for Engineers
Total Quality Management



Administrative Works

Position	Date appointed
1. Academic Coordinator II, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, Universiti Putra Malaysia	1 June 2023 – 31 May 2025
2. Committee, University Ethics For Research Involving Humans (JKEUPM)	20 March 2024 - 20 March 2026
3. Committee, Teaching And Learning Innovation Work (JKIPP), Universiti Putra Malaysia	1 March 2023 – 28 February 2025 August 2021 - May 2023
4. Seminar Coordinator, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, Universiti Putra Malaysia	July 2022 - Jun 2024
5. Task Force for Putra Open Educational Resources (PutraOER), Universiti Putra Malaysia	March 2020 – July 2021
6. Operation Manager, ErgoWorks Sdn Bhd	Dec 2015 – January 2021
7. Head of Industrial Ergonomic Lab (Postgraduates), Department of Mechanical Engineering, University of Malaya.	March 2017 – October 2017
8. Vice Treasurer / Secretariat - Exhibition on OKU & Elderly - ORKID WEC 2017, University of Malaya.	March 2014 – August 2015
9. Vice Treasurer / Secretariat - 3rd International Conference on Ergonomics 2015	July 2011 – July 2013
10. Program Manager 2nd International Conference on Ergonomics 2013	March 2011 to September 2012
11. Member of the EAC Committee (Tutor), Department of Engineering Design and Manufacture, University of Malaya.	March 2011 to September 2012
12. Coordinator / Tutor for Industrial Ergonomic Lab, Department of Engineering Design and Manufacture, University of Malaya.	November 2010 to December 2010
13. Secretariat Assistant, 2010 IEEE EMBS Conference on Biomedical Engineering & Sciences (IECBES 2010)	

Publications

Journals

1. Nurul Izzah Abd Rahman, Shudharson Ilengo and Muhammad Nazirul Iszat Ismail. (2024). Ageing Workforce Dilemma: Cognitive-strained Working Conditions in Office Setting. *Journal of Engineering Technology*, Volume 41, Number 2, 16-33.
2. Abd Rahman, N. I, Md Dawal, S. Z., Yusoff (2024). Influencing Factors of Driver's Habits and Behavior: Comparison between Young and Ageing Populations. *Industrial Engineering and Management Systems*, 57-62.
3. Muhammad Hadri Aziz, Nurul Izzah Abd Rahman, Hazreen Harith (2023). Quantification of cognitive ergonomic factors and task performance for the use of passive upper limb exoskeleton while performing overhead tasks. *Transdisciplinary Journal of Engineering and Science*. 221-235.
4. Siti Azfanizam Ahmad, Nadia Zhafira, Nurul Izzah Abd Rahman. (2023). Evaluation on perceived service quality on parcel locker delivery service. *Journal of Information System and Technology Management*, 1-17.
5. S. Rahim, A. Najmi, R. Samin, N I Rahman and S Sathurshan (2023). The Effects of Signal Processing Techniques in Damage Detection and Structural Health Monitoring. *Vibration Control, Signal Processing*, 1 – 8.
6. Abdo, A. S. A. & Rahman, N. I. A. (2023). Development Of Operator Training Simulator (OTS) In Refining Process for Atmospheric Distillation Column. *Journal of Engineering Science and Technology (Accepted: July 2023)*.
7. Abd Rahman, N. I, Md Dawal, S. Z., Yusoff, N., Hassan, S.N., & Mohamed Ariff, A.H. (2023). Trends, relationship, and model of selected service sector workers in Malaysia: Physiological responses of mental workload and mental fatigue during performing real-time tasks. *Jurnal Polimesin*. 21(2).
8. Dele-Afolabi, T.T.; Azmah Hanim, M.A.; Jung, D.W.; Ilyas, R.A.; Calin, R.; Nurul Izzah, A.R. (2023). Rice Husk as a Pore-Forming Agent: Impact of Particle Size on the Porosity and Diametral Tensile Strength of Porous Alumina Ceramics. *Coatings* 2022, 12, 1259.
9. Rahman, N.I.A., Dawal, S.Z.M. and Yusoff N. (2021). Ageing drivers' mental workload in real-time driving task based on subjective and objective measures. *Journal of Engineering Research*, Vol. 9 No. (3B)



September 2021 pp. 272-284.

10. Rahman, N.I.A., Dawal, S.Z.M. and Yusoff N. (2020). Driving Mental Workload and Performance of Ageing Drivers. *Transportation Research Part F*, 69, Pp 265-285.
11. Rahman, N.I.A., Dawal, S.Z.M., Yusoff N., Kamil N. S. M. (2018). Anthropometric measurements among four Asian countries in designing sitting and standing workstation. *Sadhana*, 43(10).
12. Dawal, S.Z.M, Mahadi, W.N.L, Mubin, M, Daruis, D.D.I, Mohamaddan, S, Razak, F.A.A, Rahman, N.I.A, Wahab, M.H.M.A, Adnan, N., Anuar, S.A., Hamsan, R. (2016). Wudu' Workstation Design for Elderly and Disabled People in Malaysia's Mosques. *Iran J Public Health*, 45 (1), Pp.114-124.
13. Rahman, N.I.A., and Dawal, S.Z.M. (2016). The Mental Workload and Alertness Levels of Train Drivers Under Simulated Conditions Based on Electroencephalogram Signals. *Malaysian Journal of Public Health Medicine*. 16 (1).

Conference Proceedings

1. Nurul Izzah Abd Rahman, Siti Zawiah Md Dawal, and Nukman Yusoff. (2021). Influencing Factors of driver's habits and behavior: Comparison between young and aging populations. *Proceedings of the Korean Society of Ergonomics Conference*, 157-161.
2. Rahman, N.I.A., Dawal, S.Z.M. and Yusoff N. (2017). Subjective responses of mental workload during real time driving: A pilot field study. *IOP Conf. Ser.: Mater. Sci. Eng.* 210 012076.
3. Aman, A., Dawal, SZM and Rahman, N.I.A. (2017) Design and analysis of wudu' (ablution) workstation for elderly in Malaysia. *IOP Conf. Ser.: Mater. Sci. Eng.* 210 012069.
4. Rahman, N. I. A., Dawal, S. Z. M., & Bahreininejad, A. (2013). The Effects of Driving Environment on the Mental Workload of Train Drivers. *Advanced Engineering Forum*, 10, Pp 93- 99.

Chapter in Books

1. N.I. Ismail, N.I.A. Rahman, S.A. Ahmad. (2024). Sustainovation in the Workplace: Addressing Cognitively Straining Working Conditions Among the Ageing Workforce Based on Work System Related Factor. In M. I. S. Ismail. (Ed.), *Advances in Manufacturing Technology and Industrial Engineering: Universiti Putra Malaysia*.
2. K.A. Norhidzam, N.I.A. Rahman, S.A. Ahmad, M. I. S. Ismail. (2024). Cognitive Load and Work Performance Level of Tasks in the Manufacturing Process of Seating Products. In M. I. S. Ismail. (Ed.), *Advances in Manufacturing Technology and Industrial Engineering: Universiti Putra Malaysia*.
3. Y.L. Liew, S.H. Tang, N.I.A. Rahman. (2024). A Study on the Working Hours for Operation Worker with Their Productivity and Fatigue Level Assessment at Glove Manufacturing Factory.
4. Dawal, S. Z. M., Rahman, N. I. A., Kamil, N. S. M., Shalahim, N. S. M., & Ismail, Z. (2016). The Relationship between Hand Grip Strength and Hand Anthropometric Dimensions of the Older Population. In A. Sulaiman (Ed.), *Moving Towards an Equitable Society*. Kuala Lumpur: Equitable Society Research Cluster (ESRC).

Research Grants/Consultations

Title	Position	Year	Source of Fund
1. Investigation on Cognitive Ergonomic-driven Technologies Impact Over Work Performance Level of Malaysia Ageing Workforce in Office Setting	Leader	2022-2024	FRGS-KPT
2. Cognitive Ergonomics Application in Manufacturing Sectors For Potential Work Performance Predictive Model Design.	Leader	2022-2024	IPM-UPM
3. Research on Mental Workload and Mental Fatigue in Service Sectors in Malaysia	Member	2019-2021	NIOSH Malaysia
4. The Relationship between Ageing Drivers Mental Workload and Driving Performance on Driving Task Related Factors	Member	2016-2019	Postgraduate Research Grant-UM
5. Design & Application of Ablution Workstation for Elderly & Disabled Person	Research Associate	2017-2019	UMRG
6. Integrated Production Planning and Decision Analysis Systems for SMEs	Research Associate	2012-2016	HIR-KPT
7. Engineering Profession in Board of Engineers Malaysia	Research Associate	2014-2016	BEM
8. Feasibility Study on The Establishment of	Research Associate	2012-2014	Jabatan



the National Product Safety Testing Laboratory				Standard Malaysia UMRG
9. Ergonomics Approach on Cockpit and Cabin Design	Research Associate	2009-2011		

Awards and Recognitions

Name of award	Title	Award Authority	Award type	Year
1. Excellence in Teaching 2022	Program Inovasi dan Appresiasi 2022	Faculty of Engineering, UPM	Certificate of Excellence	2023
2. Putra InnoCreative Poster Competition	International Putra Innocreative Carnival In Teaching And Learning (i-PicTL2022)	Center of Academic Development, UPM	Gold Award	2022
3. Invention, Innovation & Design Award	Invention, Innovation & Design Exposition 2016 (IIDEX 2016)	IIDEX 2016, UiTM	Gold Award	2016

Supervision of Students

Bachelor

Name	Title	Status
1. Muhammad Adam Bin Umar Zaman (207776)	Cognitive Workload, Task Design, And Work Performance Variations of Assembly Task in Seating Products Manufacturing	Graduated (2024)
2. Kasturi Amani Norhidzam (200624)	Cognitive load and work performance level of tasks in the manufacturing process of seating products.	Graduated (2023)
3. Shudharson A/L Ilengo (202460)	Cognitive ergonomic-driven technologies interventions impact on cognitive load and work performance level	Graduated (2023)
4. Muhammad Hadri Aziz (198934)	Cognitive Ergonomics Approach In Development Of Passive Upper Limb Exoskeleton Prototype For Overhead Task	Graduated (2022)
5. Amirul Iman Kamsi (198947)	Identifying Cognitive Ergonomic Factors In Gas District Cooling Putrajaya's Control Room Design Settings	Graduated (2022)
6. Ravi Shankar A/L Ambalakan (197260)	Determination Of Cognitive Errors In Engine Manual Assembly Line In Proton Shah Alam Manufacturing Complex	Graduated (2022)



Master

a) With Thesis

Name	Title	Type of Supervision	Status
1. Muhammad Nazirul Iszat Ismail (GS65059)	Investigation on Cognitive Ergonomic-driven Technologies Impact Over Work Performance Level of Malaysia Ageing Workforce in Office Setting	Chairman	Ongoing (2022-present)

b) Without Thesis

Name	Title	Type of Supervision	Status
1. Rudhresh A/L Yogesweran (GS70993)	Enhanced Lamination Process Through Backlight Integration For Precision V-Notch Capture And Improved Wafer Processing Time	Chairman	On-going (2025)
2. Ilangko A/L Nagaudran (GS71004)	Development Of An Automated 3d Optical Profiling System For Sic Laser Diced Wafers	Chairman	On-going (2025)
3. Nur Aleysha Binti Mohd Zin (GS65697)	Utilizing Quality Function Deployment (QFD) To Optimize Human-Computer Interaction In Industrial Settings	Chairman	On-going (2025)
4. Ahmad Farez Aqmar Azhar (GS66851)	Perceived Mental Workload, Posture and Task Performance Of Assembly Task Of Seating Product	Chairman	Graduated (2024)
5. Jabar Bin Jamaluddin (GS64727)	Ergonomic Practices and Prevalence of Computer Vision Syndrome (Csv) Among University Lecturers	Chairman	Graduated (2024)
6. Mohamad Fikri Haikal Bin Ahmad Kamal (GS65431)	Prevalence Of Musculoskeletal Disorder and Its Associated Factors Among Seaport Workers In Johor	Member	Graduated (2023)
7. Kavin Raj Naidu A/L K Gnanasegaran (GS63514)	Construction And Demolition Waste Management In Malaysia	Chairman	Graduated (2023)
8. Muhammad Khairil Farhan Bin Zainol (GS62497)	Drivers Mental Workload on Different Road Complexity	Chairman	Graduated (2023)
9. Faraji Homayoun (GS58781)	Application of Cognitive Ergonomics Principles in Construction Management	Chairman	Graduated (2022)
10. Sadeq Ameen Abdo Al-Jaberi (GS60085)	Development Of Operator Training Simulator (Ots) In Refining Process for Atmospheric Distillation Column	Chairman	Graduated (2022)

PhD

Name	Title	Type of Supervision	Status
1. Wu Chunyan (GS63836)	Fatigue Test Analysis of MXene Improved Lead-Free Solder	Member	Ongoing (2022-present)