FACULTY OF COMPUTER SCIENCE AND MATHEMATICS

DR. NAJIHAH IBRAHIM

LECTURER

My research interests include Artificial Intelligence Techniques, Modelling and Simulation, Optimization, Parallel Computing, and Computational Biology. I focus on developing AI-driven models and optimization algorithms to enhance computational simulations and solve complex problems. Additionally, I explore parallel computing strategies to improve efficiency in large-scale biological data processing.

RESEARCHER PROFILE

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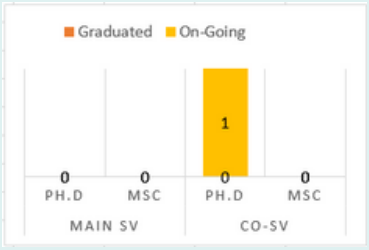
EDUCATION

- Doctor of Philosophy (Computer Sciences), Universiti Sains Malaysia (USM)
- Master of Science (Computer Sciences) USM
- Bachelor of Computer Science (Hons.) USM

AREAS OF EXPERTISE

- Artificial Intelligence
- Modelling and Simulation
- Optimization
- Parallel Computing
- Computational Biology.

SUPERVISION



COLLABORATORS

UNIVERSITI SAINS MALAYSIA

SELECTED RESEARCH PROJECTS

- Talent And Publication Enhancement-Research Grant (TAPE-RG) From Universiti Malaysia Terengganu (UMT). Multi-Objective Optimization Algorithm for Autonomous Spatial Layout Design. (2024 - 2026). RM20,000.00

SELECTED PUBLICATIONS

- **Ibrahim, N.,** Hassan, F. H., Ab Wahab, M. N., Letchmunan, S., Emergency Route Planning With Shortest Path Methods: Static and Dynamic Obstacles. International Journal of Simulation Modelling (IJSIMM) (2022) (WOS, SCOPUS, JCR:Q3)
- Zulkifli, N. N., **Ibrahim, N.,** Kassim, A. M., Collaborative Surgical Team Formation: A Proposed Theoretical Framework Using Genetic Algorithm. Journal of Advance Research in Applied Sciences and Engineering Technology (2024) 282-294. (SCOPUS)
- **Ibrahim, N.,** Hassan, F.H., Mohamed, A. S. A., The Impact of Spatial Layout Design on the Pedestrian Movement during Panic Situation: Pedestrian Survival Prediction. Journal of Physics (2019) Vol 1201(1), 1-10. (SCOPUS)
- **Ibrahim, N.**, Hassan, F.H., Zakaria, S. A., Incorporating Cellular Automaton based Microscopic Pedestrian Simulation and Genetic Algorithm for Spatial Layout Design Optimization. The Fifth International Conference on Computational Science and Technology, ICCST (2018). Singapore, Springer Singapore (Lecture Notes in Electrical Engineering), Vol. 488, 283-293. (SCOPUS)
- **Ibrahim, N.,** & Rashid, N. A., Determining an Ideal MSA Method for Constructing Phylogenetic Tree on DNA Dataset. In 2013 International Conference on Advanced Computer Science Applications and Technologies, ACSAT (2013) (pp. 42-47). IEEE. (SCOPUS)

"Transforming ideas into impactful solutions with passion and perseverance."