



CURRICULUM VITAE

Latest update, Mac 2019

Name Noraziah binti Adzhar
Profession Senior Lecturer,
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EDUCATION BACKGROUND

September 2011-November 2015 Universiti Teknologi Malaysia, Skudai, Johor.

Doctor of Philosophy (**Ph.D**), Mathematics.
Research Title: An Enhanced Simulated Annealing
Approach for Cylindrical, Rectangular Mesh, and Semi-
diagonal Torus Network Topologies

June 2008-June 2011 Universiti Teknologi Malaysia, Skudai, Johor.

Bachelor of Science (**B.Sc.**) (Hons) Mathematics
Final Year Project: Solving two dimensional heat equation
using Alternating-Direct Implicit, Crank-Nicolson and
Stone Method.

January 2008-May 2008 Universiti Teknologi Malaysia, Skudai, Johor.
MARA Fast-Track Programme.

AWARDS/RECOGNITIONS

1. Dean's Award in The Dean's Award Ceremony in the conjunction with UTM 47th Convocation Ceremony.
2. **Adzhar N**, Yusof Y, Ahmad M A and Leong S S. Obstacle-aware Routing Problem in a Rectangular Mesh Network. Creative Innovation Technology & Research Exposition (CITReX), 2019. (Silver Medal)

RESEARCH INTERESTS

Computational mathematics, Routing problem, Graph theoretical applications.

TEACHING & LEARNING

1. Applied Calculus
2. Basic Mathematics
3. Numerical Methods
4. Programming & Simulation

PUBLICATIONS (BOOK CHAPTER)

1. Norhayati Rosli, Mohd Zuki Salleh, Rozieana Khairuddin, Nur Fatimah Mohamad Hanafi, **Noraziah Adzhar**. Numerical Methods, Penerbit UMP, 2016, pp 101-127. (Internal Use)
2. Muhammad Azrin Ahmad, Abdul Rahman Mohd Kassim. Chuan Zun Liang, **Noraziah Adzhar**, Nor Alisa Mohd Damanhuri and Zulkhbri Mustopha. Technical Mathematics, Penerbit UMP, 2018. (Internal Use)
3. Yuhani Yusof, **Noraziah Adzhar** and Ku Muhammad Na'im Ku Khalif. Laboratory Workbook using C++, 2018. – *Self published*.

PUBLICATIONS (JOURNALS & PROCEEDINGS)

1. **Adzhar N** and Salleh S. Three-dimensional Cylindrical Model for Single-row Dynamic Routing. MATEMATIKA, 2014. Special Issue, 30(1a): 30-43.
2. **Adzhar N** and Salleh S. Simulated Annealing Technique for Routing in a Rectangular Mesh Network. Modelling and Simulation in Engineering, 2014.
3. **Adzhar N** and Salleh S. Obstacle-aware Routing Problem in a Rectangular Mesh Network. Applied Mathematical Sciences, 2015. 9(14): 653 – 663.
4. **Adzhar N** and Salleh S. A Preliminary Cylindrical Model for Dynamic Routing, The 4th International Conference Workshops on Basic and Applied Sciences & Regional Annual

Fundamental Science Symposium (ICOWOBAS-RAFFS), Le Grandeur Palm Resort, Senai, Johor. 3-5 Septemeber 2013.

5. **Adzhar N** and Salleh S. MESH ROUTING: Maximizing number of connections using heuristic method, International Conference on the Analysis & Mathematical Applications in Engineering & Science (AMAES), CSRI, Curtin University Sarawak, Miri, Sarawak. 19 - 22 January 2014. 161-168.
6. **Adzhar N** and Salleh S. Simulated Annealing Routing Algorithm for Semi-Diagonal Torus Networks. The 3rd International Conference on Computer Engineering and Mathematical Sciences (ICCEMS), Langkawi, Kedah. 4 - 5 December 2014. 356-362.
7. **Adzhar N** and Salleh S. An Enhanced Simulated Annealing Routing Algorithm for Semi-Diagonal Torus Network, Journal of Physics: Conference Series (890), 2017.
8. Ahmad M A, Sarmin N. H, Yusof Y, Fong W. H and **Adzhar N**, and (2018) Second Order Limit Language with Two Cutting Sites. *International Journal of Pure and Applied Mathematics*.
9. **Adzhar N**, Salleh S, Yusof Y and Ahmad M A. (2019) Routing problem in rectangular mesh network using Dijkstra's based greedy method. Journal of Physics: Conference Series 1358: 1.
10. Yusof Y, Mohamad M. S, **Adzhar N**, Mohamad Hanafi N, Elizabeth M., Abu Bakar M. F, Ibrahim M. A. (2019) Optimal Medicinal Cupping Points Selection for Asthma Disease. Journal of Physics: Conference Series 1358: 1.
11. Abu Salleh N. S., Mohd Aziz M. K. B. and **Adzhar N**. Optimal Design of a Rain Gauge Network Models: Review Paper. (2019) Journal of Physics: Conference Series 1366: 1.
12. Splicing System in Automata Theory: A Review. Khairuddin S. H., Ahmad M A., **Adzhar N**. (2019) Journal of Physics: Conference Series 1366: 1.
13. **Adzhar N**, Yusof Y and Ahmad M A. An Overview of Mobile Robot Path Planning (2019) ASM Sc Journal (*Corrected & Submitted*)

RESEARCH PROJECTS

1. New Algorithm for Obstacle-aware Routing Problem in VLSI design using VNS and Simulated Annealing Approach
[RDU1901214](#) (Leader, 1/9/2019 – 31/8/2021) (*On going*)
2. Rainfall data analysis in selected strategic rainfall catchment area in Pahang by using Modified Simulated Annealing.
[RDU190162](#) (Members, 1/1/2019 – 31/12/2020) (*On going*)
3. A Fundamental Research on Characterisation of Second Order Limit Language Using Automata Theory in DNA Splicing System.
[RDU190118](#) (Members, 1/1/2019 – 31/12/2020) (*On going*)
4. Simulated Annealing Approach for Rectangular Mesh Routing Problem.
[RDU171121](#) (Leader, 30/4/2017 – 29/4/2018) (*Completed*)

5. Routing Algorithm for Semi-Diagonal Torus Network with Dijkstra's Shortest Path Based Algorithm Using VNS and Simulated Annealing Approach.
[RDU1703188](#) (Leader, 30/6/2017 – 29/6/2019) (*On going*)
6. Optimal rain gauge network in Pahang using Particle Swarm Optimization.
[RDU1703196](#) (Members, 30/6/2017 – 29/6/2019) (*On going*)
7. Development of Second Order Limit Language in Various Splicing Models.
[RDU1703278](#) (Members, 25/8/2017 – 24/8/2018) (*On going*)
8. Modeling of Medicinal Cupping Point(s) using Adjacency Matrix Approach.
[RDU1703259](#) (Members, 30/6/2017 – 29/6/2019) (*On going*)