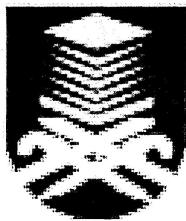


# **DYNAMIC STABILITY PARAMETER ESTIMATION USING ARTIFICIAL IMMUNE SYSTEM**

Project report is presented in partial fulfillment for the award of the  
Bachelor of Electrical Engineering (Hons)  
**UNIVERSITI TEKNOLOGI MARA (UiTM)**



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## ACKNOWLEDGEMENT

Alhamdulillah, thanks to Allah S.W.T the Beneficent, the Merciful, who gives me patience, strength and ability in completing this project and thesis. All perfect praises belongs to Allah alone, Lord of the world. May his blessing be upon prophet Muhammad S.A.W and the members of his family and companies.

This project would not have been successful without the help and encouragement, understanding and sacrifices of my lovely husband, Mohd Oulul Agazami Bin Mohd Suput, the spirit of my son Muhammad Danish Bin Mohd Oulul Agazami and not forget the sacrifices off my mother

I would like to thank all of those who have contributed to the completion of this project, in particular my project supervisor: Dr Ismail Musirin for his patience, inspiration, contribution of precious ideas, proposals, causal, support, encouragement and constant guidance which has helped me to successfully complete the project and thesis. Needless to say that without his assistance, this project could hardly be finished.

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## **ABSTRACT**

Dynamic stability studies are about voltage profiles and power flows in the system before, during, and immediately after a major disturbance. In this project paper Artificial Immune Technique is used to performed dynamic stability studies.

Voltage stability is a power progressing issue in power system study. There are two modes of voltage stability namely the steady-state (static) and the dynamic stability. The steady-state is adequate for non-soft (large) scale system while in the soft stability (small) requires dynamic stability assessment.

This paper proposes the use of artificial immune system (AIS) for estimating the dynamic stability parameter. AIS is used as the optimization technique which aims to search for optimal solution of the corresponding parameters. A test system will be used to evaluate the performance of the proposed technique.

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