

PREDICTION PERFORMANCE OF DATA SETS BY  
USING ARTIFICIAL NEURAL FUZZY  
INFERENCE SYSTEM

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Predicting performance of unit trust by using artificial neural fuzzy inference system / Kenard Tan Peng Loong.

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**PREDICTING PERFORMANCE OF UNIT TRUST BY USING ARTIFICIAL  
NEURAL FUZZY INFERENCE SYSTEM**

By  
**KENARD TAN PENG LOONG**

A final year project submitted in partial fulfillment of  
the requirements for the award of the degree of  
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**DEPARTMENT OF MATHEMATICS  
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**PENGAKUAN DAN PENGESAHAN LAPORAN MAT 4499B**

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: Predicting Performance Of Unit Trust By Using Artificial Neural Fuzzy Inference System oleh Kenard Tan Peng Loong, No.Matrik: UK13188 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Matematik sebagai memenuhi sebahagian daripada keperluan memperoleh Ijazah Sarjana Muda Sains (Matematik Kewangan), Fakulti Sains dan Teknologi, UMT.

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## DECLARATION

I hereby declare that this thesis entitled A Artificial Neural Fuzzy Inference System For Unit Trust Prediction is the result of my own research except as cited in the references.

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## PREDICTING PERFORMANCE OF UNIT TRUST BY USING ARTIFICIAL NEURAL FUZZY INFERENCE SYSTEM

### **ABSTRACT**

An Artificial Intelligence model is successful in scientific fields such as medicine and engineering field. In this paper Artificial Neural Fuzzy Inference System (ANFIS) is developed for unit trust prediction. ANFIS are learning a relationship between inputs and outputs and it is dependent on the data to achieve a highly nonlinear mapping and it is superior to common linear methods in reproducing nonlinear time series. ANFIS have been used to predict the performance of three types of fund in Prudential Management fund based on the net asset value. ANFIS is used to forecast the future prices so investor can know how well each unit trust does perform and it is useful to help investor in making decision to invest in unit trust.

## MERAMALKAN PRESTASI UNIT AMANAH DENGAN MENGGUNAKAN ARTIFICIAL NEURAL FUZZY INFERENCE SYSTEM

### **ABSTRAK**

Satu model Kecerdasan Buatan telah berjaya dalam bidang saintifik seperti bidang perubatan dan bidang kejuruteraan. Dalam kertas ini Artificial Neural Fuzzy Inference System (ANFIS) dibangunkan untuk membuat ramalan unit amanah. ANFIS digunakan untuk mempelajari satu perhubungan antara input dan pengeluaran output data dan ia adalah bergantung pada data bagi mencapai satu pemetaan yang tak linear . ANFIS telah digunakan untuk meramal prestasi tiga jenis dana dalam dana Prudential Management berdasarkan nilai aset bersih. ANFIS digunakan untuk meramal harga masa depan jadi pelabur dapat mengetahui prestasi setiap dana dan ia dapat membantu pelabur untuk membuat keputusan dalam pelaburan unit amanah.