UNIVERSITY PROGRAM SELECTION USING FEEDFORWARD NEURAL NETWORK (FFNN)

FINAL YEAR PROJECT REPORT

A 3ra Year Student

Project thesis submitted in part fulfilment of the Bachelor of Computer Science (Hons) with the supervision of Assoc. Prof. Dr. Syed Ahmad Sheikh Al-Junid co-ordinated by Assoc. Prof. Zaidah Binti Ibrahim

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Abstract

Selecting programs that matches one's qualification with the university's program requirements is not an easy task especially for the Sijil Pelajaran Malaysia (SPM) leavers. Thus, this project aims to select the program that matches the SPM results with diploma program offered at the Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA. The data used is from the students that register in January 2009. The total number of data is 120 where 100 data is used for training and 20 data is used for testing. The data is massaged or categorized where the data is converted into binary numbers because Artificial Neural Network (ANN) performs better with binary numbers. The FeedForward Neural Network (FFNN) technique has been used in this project with the step function as the activation function to determine the calculation of the training data and testing data. The university program selection performance of the FFNN 88.5% accurate which shows that FFNN is a good technique for university program selection.

Keywords: neural networks, Feedforward, decision, selection

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