



## FACULTY OF ENGINEERING AND TECHOLOGY

School of Engineering

## FINAL YEAR ENGINEERING PROJECT (2004 – 2005)

## **Final Report**

**PROJECT TITLE** 

: THE SPEECH RECOGNITION

**MACHINE** 

**ROUTE** 

: B.ENG (HONS)

**COMMUNICATION &** 

**ELECTRONIC ENGINEERING** 

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**DURATION** 

: MAY 2004 - JAN 2005



## **Abstract**

A speech recognition system is a device that is able to analyse raw speech signal inputs by converting them into readable form, and produces certain outputs. The description of the project has to write or use software that can allow any voice to be recognized. The software must be able to a convert the words into text. Further enhancement need to be made such that the text can be saved into a text file.

In this project, the system would classify each raw speech signal using multiplayer perceptrons in artificial neural networks. By using this network, the speech recognition system can be trained to memorize each word and is able to determine in which class a test input word belongs. This report explains what the speech recognition is about in details and also shows how classifications are done by explaining the classification algorithm and briefly explaining the MATLAB simulation programs and output plots.

The project is being done as a partial fulfillment of the requirement for the degree of Bachelor of Engineering done at University College Sedaya International with the University of Northumbria at Newcastle.