PATTERN RECOGNITION USING ARTIFICIAL NEURAL NETWORK

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ABSTRACT

The purpose of this project is to develope an organizing discipline by which neural network system can be design for specific computations. Furthermore, it is also to recognize and make use of both the similarities and differences between well-established procedures and the newly proposed neural approaches.

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CHAPTER 1

1.0   Introduction

Artificial neural network models have been studied for many years in the hope achieving human like performance in the field of speech and image recognition. These models are composed of many nonlinear computational element operating in parallel and arranged in patterns reminiscent of biological neural nets.

From a technological viewpoint, neural nets are of interest because they offer a computational approach that may prove to be a very effective way of solving certain problems that are difficult to solve by conventional means. Conventional problem-solving methods require an explicit representation of the mapping between input and output.

Neural nets do not require that the mapping from input to output be explicitly represented in a program. For this reason they have been called "non algorithmic computing."