



PROJECT REPORT
PATTERN RECOGNITION WITH
BACKPROPAGATION ALGORITHM

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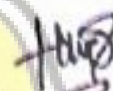
APPROVAL AND RATIFICATION PAGE

PROJECT REPORT
Pattern Recognition With Backpropagation Algorithm
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This project report has been approved and ratified by the Faculty of
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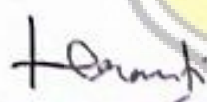

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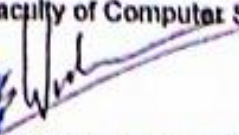

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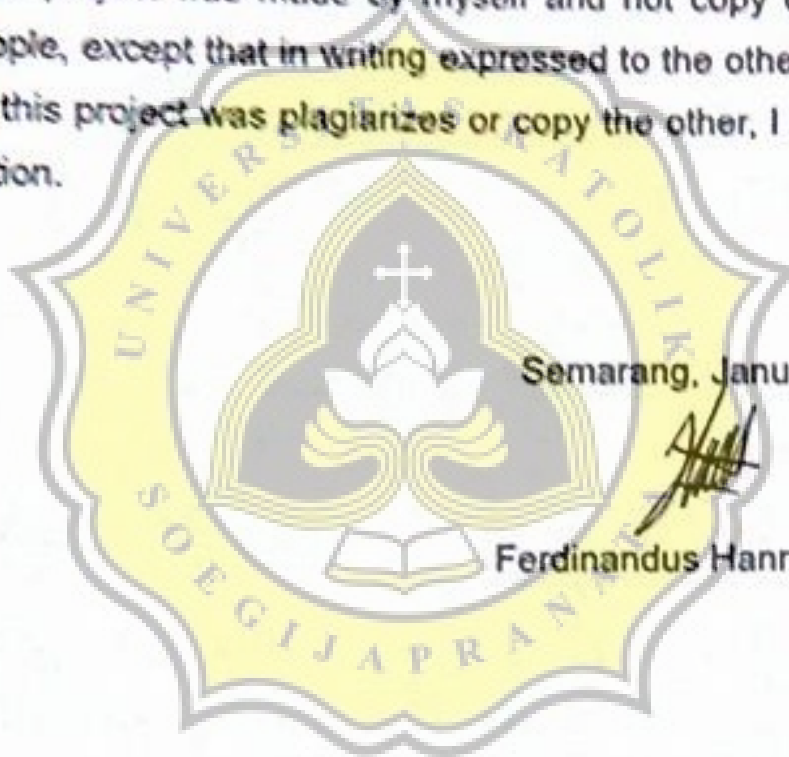
STATEMENT OF ORIGINALITY

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ABSTRACT

Complex pattern recognition is a difficult problem to solve because in the real world patterns / images to be recognized has noise. The unavailability of good mathematical calculation that can produce the desired translation, nauseating to be able to resolve a problem of pattern recognition. Imagine if you have to match in the database one by one that there is also troublesome, as resolved by adding a large number of programs and inefficient.

Therefore to solve the problem, back propagation algorithm is the best answer to a complex pattern recognition. Backpropagation algorithm is implement at Pattern Recognition Application. Backpropagation works far faster than earlier approaches to learning, making it possible to use neural nets to solve problems which had previously been insoluble. Today, the backpropagation algorithm is the workhorse of learning in neural networks. This algorithm do a two-stage calculation. First, forward propagation to calculate the error between the actual output and the target. Second, backward propagation, which propagates the error back to fix the weights on all existing neurons.

By using the back propagation algorithm, pattern recognition problems more easily and achieved results better than using matching algorithm. Because the character recognition using the data containing noise and sizeable.

Keywords : *Backpropagation, Pattern Recognition, Neural Network*

PREFACE

The project report split into six chapters. In the first chapter, the report will discuss why these applications need to be made, the scope of which can be solved by the application, and the application objectives.

In chapter II, the report will discuss the data structure to be used, ie 2D arrays and arrays, and discusses the algorithm to be used is Backpropagation algorithm.

In Chapter III, this report will discuss step by step which has traversed to reach the final result.

In Chapter IV of this report will discuss the flow of activities performed by the user (use case diagram), discusses the description of the process sequence in detail and the relationship between a process with other processes in a program (flow charts), and discusses the relationship between one class and other classes.

In Chapter V, this report will discuss how to implement the Backpropagation algorithm into the program along step by step, and the results after the program starts.

In chapter VI, this report will discuss about the conclusion of the program, and the desire to achieve for future research.

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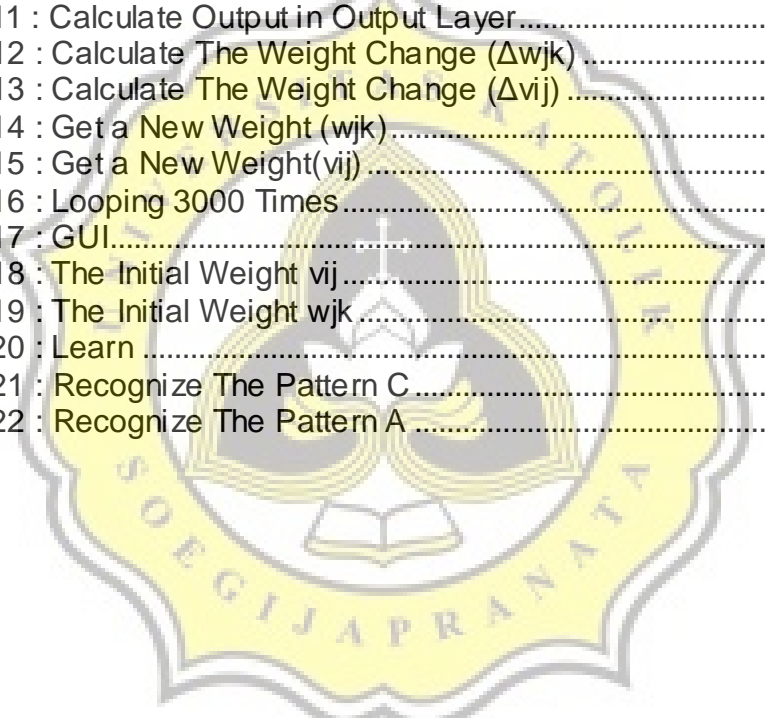


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