

## **ABSTRACT**

### **IMPLEMENTATION OF THE BACKPROPAGATION ALGORITHM ON THE PATTERNS RECOGNITION OF MANDARIN NUMBER**

*Language is a means of communication that plays an important role in society. One of the international languages used is Mandarin. Mandarin studied by all ages, ranging from children to adults and Mandarin has differences with English and other languages, namely the way of writing and how to pronounce, besides Mandarin there are mandarin numbers and mandarin letters. This research will later create a system that is able to recognize mandarin numbers. With computerized technology developed at the moment, one of the existing technological developments is artificial neural networks which are branches of artificial intelligence that are closely related to pattern recognition. Test results from the recognition system of mandarin numbers with backpropagation artificial neural networks resulted in an accuracy of 84,6% by conducting experiments 26 times*

*Keywords: Mandarin Languages, Pattern Recognition, Artificial Neural Network*