

## ***Abstract***

*Numeric character image has many possible pattern for each category. Beside that, possibility to have noise, deformation, and translation in each pattern is very high. As impact, it is impossible to make an application to identify numeric character category with conventional algorithm. This final project is develop to identify numeric character with learning process one kind of artificial neural network designed special for 2D image pattern identification called neocognitron. Data set used in this system are images from handwritten character numeric(full feature) with total pattern is 6000 patterns(600 patterns for each category). created by volunteers as testing data and local feature from supervised neocognitron model by Fukushima in 1988 as training data. As the result of experiment, the highest accuracy is 70,05%.*

**Keyword :** *Artificial Neural Network, Neocognitron, learning, pattern, 2D image, numeric character.*