ABSTRACT

Right now, face recognition become a subject that classified in biometric that many speak of. Human face has a character and *pattern* to recognized. In security, face recognition can help to characterize someone. Other than security, face recognition can be used in "people control" area. For example, limitation consumen for product that based of age e.g cigarete.

Clasification is a proses to grouping some data into some class. In this research, *Cascade-Correlation neural network* is implemented. *Cascade-Correlation* has 2 idea, first *cascade* architecture, where *hidden* unit is added one by one in one time and do not change after been added. And second is *learning* algorithm where is creating and install a new *hidden* unit. *Cascade-Correlation neural network* has advantage of selfbuild its *network* architecture. *Edge Detection* is used in *preprocessing* to extract facial *feature.*

Cascade Correlation in classification at this research gives a good result with value of *average* total 73,26%. And the highest value that can be reach in this research is 92,78%. *Cascade Correlation* gives a stable result with giving a minimum *hidden* unit in the solution.

Keyword : *Cascade-Correlation, feature* extraction, age clasification