ABSTRACT

**Title: Performance Evaluation in Iris Recognition Using Libor Masek Algorithm.**

This study is to compare the performance of iris recognition between the open source algorithm (Libor Masek) and the commercially available one (VeriEye). There are five processes to evaluate the performance; 1) Resize Bath iris images 1280x960 into 640x480 using Matlab, 2) Convert Bath iris images from database into jpeg format using Ivan Image Converter, 3) Convert Bath iris images into grayscales using Matlab, 4) Run Libor Masek’s algorithm and VeriEye’s algorithm, 5) Calculate the significant of time with t-test statistical method using SPSS software. The results of Receiver Operating Characteristic (ROC) show VeriEye’s algorithm is much better than Libor Masek’s algorithm, more specifically False Accept Rate (FAR) and False Reject Rate (FRR). However, there is no significant difference in processing time between the two algorithms.

**Keywords**- VeriEye, Libor Masek, Biometric, Iris, Iris recognition, Bath images