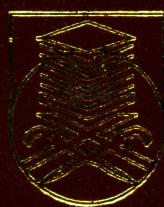


BINARIZATION AND IMAGE ENHANCEMENT OF  
TRADITIONAL SONGKET MOTIFS IN TERENGGANU



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## **PENGHARGAAN**

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## **ABSTRACT**

The beauty of songket, Malaysia's popular textile handicraft lies in the patterns and motifs inspired by its weavers and passed down through generations. The need to preserve this cultural heritage initiated this project that aims to create a collection of digitized traditional songket motifs. Data for this project are acquired through scanning or capturing photographs of songket patterns. The motifs are then extracted from the patterns, enhanced and filtered for noise removal, and converted to binary form. Finally, the motifs are subjected to morphological operations to restore the original motif shape. Twenty-five motifs are used in this project and the results show that for each motif, different techniques of filtering and morphological operations are needed to achieve the best-desired output. However, several recommendations are presented to guide users to accomplish the correct intended results. This report begins with an overview of the present situation and issues pertaining to the songket industry in Malaysia. The project objectives, scope and significance are then mentioned. Chapter II presents related literature reviews on image restoration, enhancement and binarization. Details of the methodologies are discussed in Chapter III and Chapter IV shows the experimentation results. Finally, Chapter V presents the findings, benefits achieved and recommendation for future work.