

UNIVERSITY TECHNOLOGY MARA (UITM)

**BEADS SELECTION SYSTEM USING GRID-
BASED TECHNIQUE**

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ABSTRACT

Beads designs were changing and have improvement from time to time. Beaded clothing transforms simple clothing into unique treasures by adding vivid and colorful beads and hand sculpted wires. Nowadays beaded clothing has been widely used for fulfilling fashion needs. At this time, making, choosing and determination of bead on garments was made by using the sketch or through imaginative. This makes it difficult for beads enthusiast to choose the type and color of appropriate beads on their clothing. This thesis is a new innovative research which will combine traditional way together with modern style to help designers choose the beads on their customer's clothes. It focuses on selecting the appropriate form of beads in single floral motif image. The objective of this thesis is to segment the floral motif via segmentation process by using histogram-based segmentation and clustering method. From there, Image enhancement is then used to improve the floral image before detecting the boundary to retrieve the image. Then, this system will detect shape of a floral motif using boundary based technique. Next, Grid based method is used to insert the beads and the system is evaluated by checking the functionality of the system whether it works or not. The result shows that boundary based detection can be used to detect the shape of the floral motif image. Grid based technique can be used to insert the selected beads into the detected shape of the image.

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TABLE OF CONTENT

DECLARATION	i
ABSTRACT	ii
ACKNOWLEDGEMENT	iii
TABLE OF CONTENT	iv
LIST OF TABLE	vii
LIST OF FIGURE	viii
Chapter 1 Introduction	
1.1 Introduction.....	1
1.2 Problem Statement.....	3
1.3 Research Objectives.....	4
1.4 Scope of Thesis.....	4
1.5 Significant of Thesis.....	5
Chapter 2 Literature Review	
2.1 Introduction.....	6
2.2 Design of Beads Work.....	7
2.3 Image Segmentation.....	11
2.4 Shape Based Image Retrieval.....	12
2.5 Extracting Edge-End Pixels.....	17
2.6 Other Related Research.....	22
2.6.1 Fourier Descriptor (FD).....	22
2.6.2 Texture Features and KNN Classification of Flower Images.....	23
2.7 Choosing Beads Types and Sizes.....	26

Chapter 3 Research Methodology

3.1 Methodology.....	30
3.2 Background of Study.....	31
3.3 Image Processing.....	32
3.3.1 Image Collection.....	32
3.3.2 Image Segmentation.....	33
3.3.3 Morphology Operation.....	33
3.3.4 Boundary Based.....	34
3.3.5 Grid Based.....	34
3.4 Development Stage.....	35
3.4.1 Hardware and Software Requirement.....	37
3.4.1.1 Hardware Requirements for Development.....	37
3.4.1.2 Software Requirements for Development.....	37
3.4.1.3 Hardware Requirements for End User.....	37
3.4.1.4 Software Requirements for End User.....	37

Chapter 4 Analysis and Findings

4.0 Introduction.....	39
4.1 Loading Image.....	39
4.2 Image Segmentation.....	40
4.3 Binary Image.....	41
4.4 Image Enhancement.....	42
4.5 Boundary Detection.....	43
4.6 Grid Based Image.....	44
4.7 Beads Selection.....	45