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Outline Extraction and Identification of Corner Points for a Two-Dimensional Image

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STUDENT'S DECLARATION

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

Outline extraction is very important in image processing to get the best result from image. This study used MATLAB to extract the outline. Corner point is a two-line intersection and not every two-line intersection is a corner point. Aim of this study is to compare the methods in corner point detection. This study also to extract the outline of a two-dimensional image of a leaf. This study was done by using SUSAN Detector and Shi-Tomasi Corner Detection in Python. Based on the result and discussion, the findings from this study shown that 397 corner points in 239.769 seconds were detected from using SUSAN Detector, meanwhile 94 corner points in 275.357 seconds by using Shi-Tomasi Detection. As a conclusion, SUSAN Detector more accurate in detecting corner points. This study may be useful especially for other researchers to detect corner points by using this method.

Keyword: Corner points, SUSAN Detector, Shi-Tomasi Corner Detection

TABLE OF CONTENTS