



PROJECT REPORT
GEOMETRY IDENTIFICATION WITH POINTS
RECOGNITION METHOD

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2019

APPROVAL AND RATIFICATION PAGE

**IDENTIFICATION OF GEOMETRY ON 2-D PICTURE WITH THINNING
AND EDGE DETECTION METHOD**

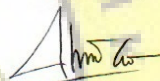
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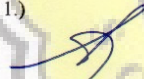
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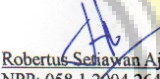

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STATEMENT OF ORIGINALITY

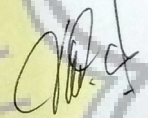
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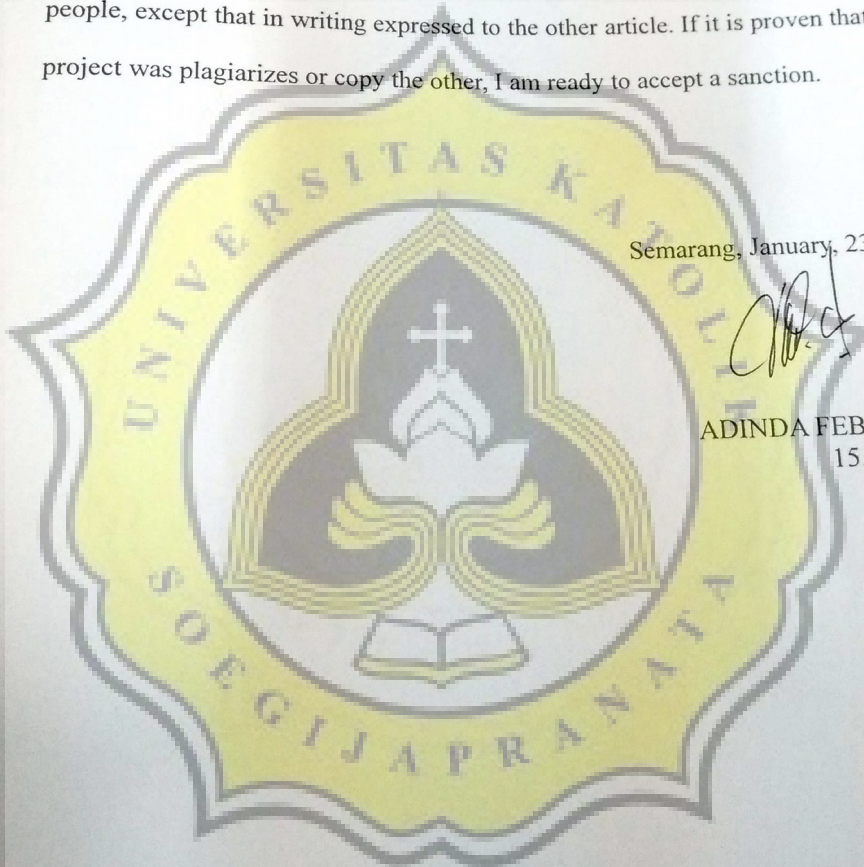
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ABSTRACT

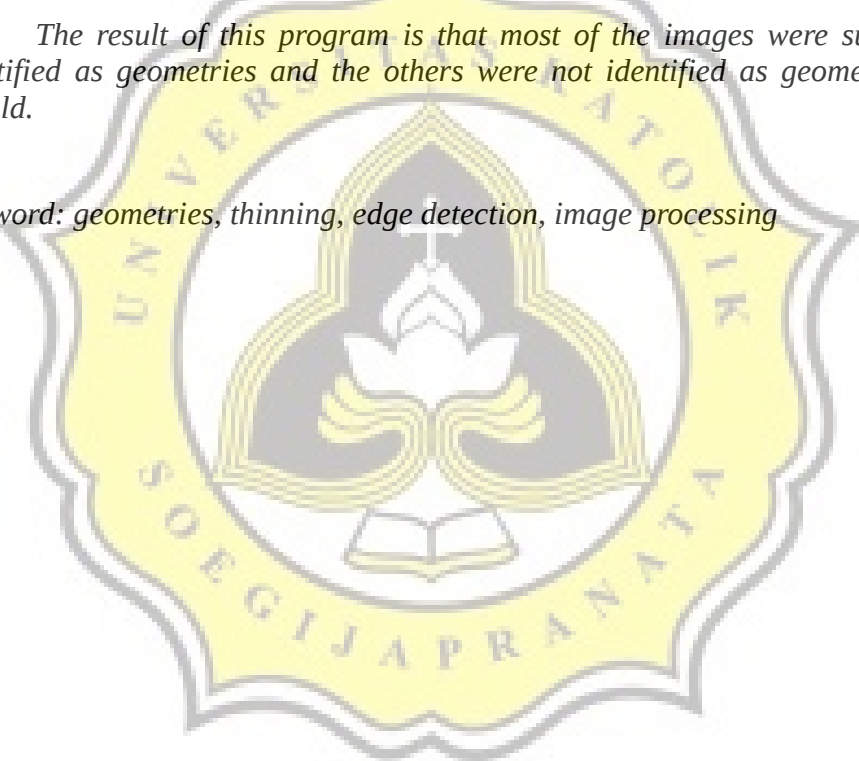
The geometries that will be analyzed in this research is a geometry that only has a straight line and has no curved lines. The geometries which were analyzed are square, rectangular, triangular and trapezoidal.

To identify geometries, the images must be converted from the colored image into a monochrome image then after obtaining a monochrome image, a point searching must be done so the object can be analyzed whether the object is geometry or not.

This testing process uses 44 images as testing data. This 44 images consists of 10 square images, 10 rectangular images, 14 triangular images (5 of 14 triangles is rotated), and 10 trapezoidal images (2 of 10 trapezoids is rotated).

The result of this program is that most of the images were successfully identified as geometries and the others were not identified as geometries as it should.

Keyword: geometries, thinning, edge detection, image processing



PREFACE

This program identifies flat shapes with images. The flat builds identified by this program are square, rectangular, triangular and trapezoidal. This program can identify flat builds by detecting 4 points on the object. In addition, the program can still identify flat building even though the flat build has been rotated.



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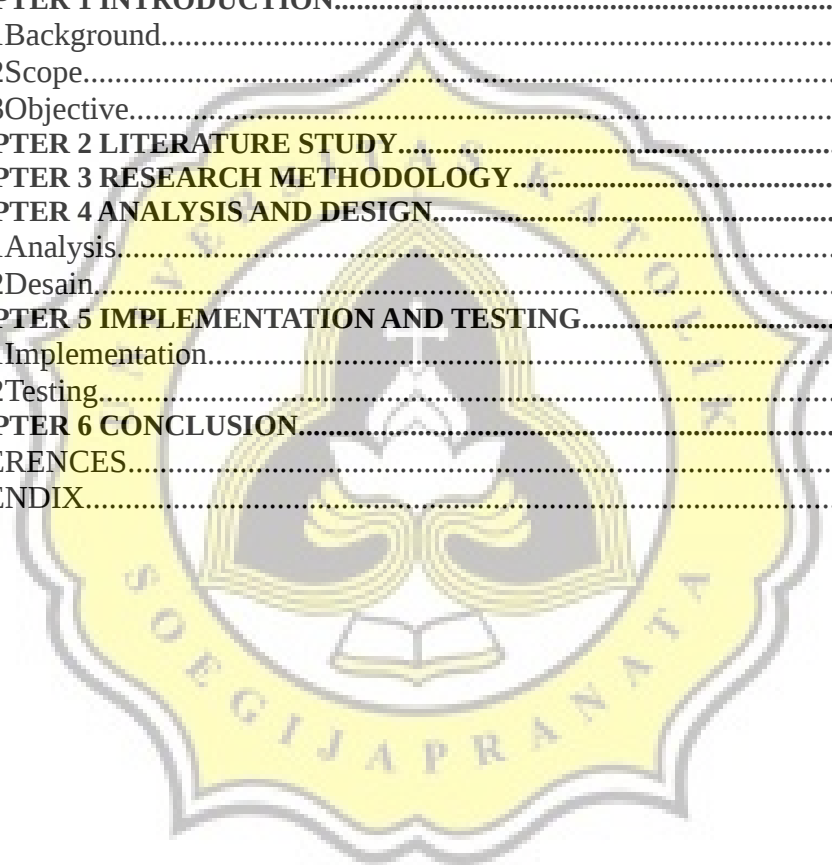


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