## ABSTRACT

The development of technology is growing more rapidly, one of them is a car robot without a driver who can help navigate the car to drive. The navigation is designed to determine the direction of the steering wheel to walk along the track properly.

In this final project, an image processing algorithm is designed to help navigate miniature cars. The design of this algorithm uses the Python programming language and has the OpenCV library. In this final project has an image as an input while for the output in this final project is to have a miderror value to find out the position of the car in the middle of the track or not.

The results of this Final Project Miderror obtained in Python and measured on the ruler has an average error value of 10.05433%, and identification of the shape of the path can distinguish between straight, right turn, and left turn.

Keywords: Robot Self Driving Car, Image Processing, Miderror