# ABSTRACT

*Comfort is the main thing in driving. At night, many things that can interfere the comfort of driving, one of which is the car lights that illuminate the road excessively and can interfere the other driver's view and dazzle to other driver. The light is either in front or behind the car. Therefore, we need a lighting system on the car where the intensity and direction of light on the car can be controlled based on the movement of objects in front of it.*

*In this final project will be designed prototype of controlling the intensity and direction of car lights, where the direction of high beam head lamp light will be adjusted with the movement of vehicles in front of it. The output of this system is the intensity of light. The intensity of the light will be dark or not illuminated to the other driver's view, while the other side of the other driver's view will be bright or illuminated. In this system the camera serves to detect and detect objects in front of it, where the camera will read the intensity of light from other vehicles. This system is designed using object tracking method with blob detection.*

*From the results of this system is expected to create a protoype of driving comfort system for road users, especially car driver so as to improve the user's visibility at night without disturbing the views of other drivers. The system will focus on the use of car lights at night.*

**Keywords**: *Headlamp, Light Intensity, Image Processing, Object Tracking*