

ABSTRACT

The most rapid development of robotics technology, many industries and health agencies such as hospitals use robots to improve the effectiveness and efficiency of their work. AGV (Automated Guided Vehicle) is a mobile robot that functions to carry an object somewhere regularly. The use of automatically guided vehicles (AGV) is undergoing major developments in distribution tasks in hospital logistics [1]. At the Hospital there is medical triage which is a colored trajectory on the floor for differentiating handlers to patients.

An important artificial landmark for autonomous vehicles is used as a robot reference to localize or navigate within its environment. Sensor Vision is a good choice for robot sensors because it is flexible enough to detect or recognize any feature with any color and size. Vision systems or a combination of vision systems with sensors have been used in many localization and navigation systems [5].

This study designed a vision sensor that can recognize color lines and artificial landmarks found on the floor for navigation from the AGV (Automated Guided Vehicle).

Keywords: *AGV, sensor vision, artificial landmark recognition, line color recognition.*