

AUTOMATIC VEHICLE TRACKING SYSTEM FOR MOVING OBJECT

Ye Naing, Hlaing Thida Oo

*Department of Computer Technology, University of
Computer Studies (Yangon)
yenaing.ucss@gmail.com, hlaingthida.oo@gmail.com*

Abstract

Nowadays, people use automatic system to reduce their energy and time. Modern industries are increasingly demanding process automation in all sectors. Therefore, people use automatic system for their environment. The variable speed drives, which can control the speed of A.C/D.C motors, are indispensable controlling elements in automation systems. In this system, the tracking vehicle is programmed to maintain a fixed distance from the moving object and follow it. The proposed system implements to follow a moving object based on automatic tracking system with three processes: distance stabilizing process, line tracking system and main control system. The distance stabilizing process is the main process to control the motor's PWM (Pulse-Width-Modulation) speed as the feedback of ultrasonic sensor. According to the result of reflective sensor, the system will control the direction of left and right motors in line tracking system. The main control system drives the vehicle based on the conditions of distance stabilizing process and line tracking process. This system presents the better quality, increased production and reduced costs. The Arduino, one of the best ways for precision control with low cost, easy to use and compatible with open source operating system is used as a micro controller in this system.