Raspberry Pi Mobile Robot using OpenCV

Written by Mada Jimmy Sunday, 23 March 2014 11:20 -

In this article I like to share our experience about mobile robot project using Raspberry Pi as a main controller. Raspberry Pi is one of the popular mainboard recently as it is small, cheap and rich a lot of feature. Because of these reasons, I like to use it to control mobile robot, in this case we use mechanical robot platform from Vex. Objective of this project is to build pick and place mobile robot using image processing. We use PiCamera board to capture image and then process it using OpenCV library installed on Raspberry Pi.

Here are the steps of the installation.

- Installing OS to the SD Card. We use Rasbian, refer to http://www.raspberrypi.org/quick-start-guide
 - Installing PiCamera, refer to www.raspberrypi.org/camera
 - Installing OpenCV library, refer to

http://denis.doublebuffer.net/lablog/2012/08/10/setting-everything-up-for-opencv-raspberry-pi/

- Installing WiringPi library, refer to www.wiringpi.com

Here is the video:

http://www.youtube.com/watch?v=IJCzeOmIW10

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