

Experiments for EE324: Control Systems Lab

3. Control of a Line Following Robot (Spark V):

Target:

Design and implement a PID controller for the Spark V robot to make it follow continuous lines (papers with printed sample lines will be provided) on the ground using the sensors provided on the robot for this purpose.

We will provide a sample source code (which can only move the robot fwd/back etc) to start you off. The TAs will show you how to load and initialize such programs on the Spark V. You are required to download and read the Spark V manual and AVR programming guides so as to program the line following feature. Line following code for various programming languages and platforms are easily available on the Internet. You are encouraged to refer to them to get initiated into this domain.