

SANTA CLARA UNIVERSITY	ELEN 115 Spring 2023	Shoba Krishnan
Project # 1: Sensors		

I. OBJECTIVES

- To learn how to configure a sensor.
- To learn how to read a data sheet to understand device behavior
- To design an experiment to study the characteristics of a sensor

II. Pre-lab

Sensor 1:

To obtain a electrical voltage or current to feed into an electronic circuit we need to sense physical quantities. There are many type of sensors, but in this lab we use a photoresistor.

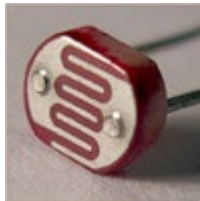


Figure 1: Photoresistor

Explain the behavior of a photoresistor. Draw a schematic of a simple circuit that uses the photoresistor and can help detect the prescence of varying amounts of light.

Sensor 2:

We would like to study a flex sensor for the lab. Look up the data sheet of a flex sensor and explain how it works. Give a possible application for such a sensor.

In lab you will be designing an experiment to characterize a flex sensor. Come prepared with some ideas.