Optical Sensor Research

What Types of Optical Sensors are There?

Optical sensors are used to convert light rays into an electronic signal, measuring the amount of light energy received by the sensor and converting this into “a form that is readable by an integrated measuring device” (ElProCus, 2020). They usually

The most common kinds of optical sensors, used in real world applications, are:

* Photoconductive devices, converting a change in light into a change in resistance (ElProCus, 2020).
* Photovoltaic cell (solar cell), converting a change in light into an output voltage (ElProCus, 2020).
* Photodiodes, converting a measure of light into an output current (ElProCus, 2020).

What are Typical Applications of Optical Sensors?

ElProCus (2020) *Optical Sensor Basics and Applications.* Available at: https://www.elprocus.com/optical-sensors-types-basics-and-applications/ (Accessed 14/02/2020)

How Can Control be Achieved by a Microprocessor, Sensors and Motors?

* Discuss closed-loop control

WhatIs (2020) *Closed Loop Control System.* Available at: https://whatis.techtarget.com/definition/closed-loop-control-system (Accessed 14/02/2020)

Other Useful Links

Robot Platform (2020) *Wireless Communication.* Available at: http://www.robotplatform.com/knowledge/communication/wireless\_communication.html (Accessed 14/02/2020)

C. Benson RobotShop (2018) *How to Make a Robot – Lesson 4: Understanding Microcontrollers.* Available at: https://www.robotshop.com/community/tutorials/show/how-to-make-a-robot-lesson-4-understanding-microcontrollers (Accessed 14/02/2020)

RoboticLab (2020) *Microcontrollers and Robotics.* Available at: https://home.roboticlab.eu/en/microcontrollers (Accessed 14/02/2020)

SparkFun (2020) *Analog to Digital Conversion.* Available at: https://learn.sparkfun.com/tutorials/analog-to-digital-conversion/all (Accessed 14/02/2020)

References