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Topic: Resistor Value Prediction using Machine Learning

ABSTRACT

A resistor is a passive two-terminal electrical component that implements electrical resistance as a circuit element.The Project 'Resistor Value Prediction Using Machine Learning aims at finding the resistance value from the provided image through Image Processing Techniques and final value is predicted with the use of machine learning. Here 4 banded resistors are considered for our task.The existing system find the value with the help of color code chart.Every resistor is equipped with color bands can be of any number from 3 to 6.There are 12 colors are present in a color code chart.Each color has an associated value.Using the formula resistance is calculated.In our project we are using resistor images.So we need to identify the object resistor. Once it is done bands have to be extracted,Color in each bands has to be gathered.Then color code mapping is performed.Finally training is performed.For that supervised learning methods are implemented.More learning algorithms are implemented to find out better performed one.

Signature of Scrum Master