Screening Device for Color Blindness Detection

Status: Filled

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Project Description

I BACKGROUND

Color blindness is a prevalent eye disease affecting more than 20% of the population. Although, in many cases color blindness is not severe and may not change the life style of the patient; but in severe cases it should be screened and treated. The gold standard for color blindness detection is Ishihara test, which is time consuming and inaccurate. Ophthalight's patent pending technology can be adopted to perform color blindness test rapidly with a high accuracy.

II PROJECT DETAILS

During the course of this project, the team will develop a color-blindness screening device, by performing required eye tests. The final product will be a wireless portable goggle, which can be worn by the patient, while the physician can run the test and see the results in real-time. The team will work closely with Ophthalight's medical advisors/engineers to ensure that the tests are being performed accurately and the test results are valid.

III DELIVERABLES

Month	Deliverable	Required Expertise
1	Setup embedded system including cameras. Program and test it for wireless communicate with other devices Design and simulate controllable RGB LED Boards	Embedded system PCB design C/C++
2	Implement embedded code to control the cameras	

4	Implement full chain software for real-time communication between embedde