ABSTRACT

Diabetic retinopathy is caused by damage to the blood vessels in the tissue at the back of the eye (retina). Poorly controlled blood sugar is a risk factor. Early symptoms include floaters, blurriness, dark areas of vision and difficulty perceiving colors. Blindness can occur. Mild cases may be treated with careful diabetes management. Advanced cases may require laser treatment or surgery. Our project aims to detect the diabetic retinopathy by Digital image processing that can integrate image processing techniques together in order to predict whether the input fundus/retinal image received from the patient is affected with Diabetic Retinopathy or not; if affected, the Digital image will display the severity along with the required action needed to be undertaken by the user / patient. This essentially reduces the processing time involved in the process of detecting the disease.

ABSTRACT

The main goal of a smart city is to optimize city functions and promote economic growth while also improving the quality of life for citizens by using smart technologies and data analysis. The value lies in how this technology is used rather than simply how much technology is available. Cities with futuristic products bring us a smart city. With advance of technology one must focus on all the sectors like agriculture, industry, education, healthcare and waste management in order to make the entire city smarter. This project brings us the idea to integrate five different technology products each of different domain which can help the cities to become smarter in all possible ways. This project contains two robots and three device systems namely (1) Smart Irrigation Cardio for Agriculture (2) Sankat Mochan (SM) BOT with Drone for Industry (3) Lib Less Lib for Education (4) Gareward for Waste Management (5) Smart Mirror for Healthcare. The Integration of all these technology products enhances the smart city in all sectors such that each sector works at its best and produce great results.