

COLOR RECOGNITION SYSTEM USING NEURAL NETWORK

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ABSTRACT

Interest in Artificial Neural Network has sparked research efforts in many disciplines, including neurobiology, physics, mathematics, computer science and engineering. The result of such studies offers the promise of a new generation of computing devices with computational power beyond the reach of current computers. This project introduces the state-of-the-art of a neural network, as the power of the machine that has the abilities of both computers and human brains. An Artificial Neural Network is trying to mimic the structure and function of human nervous system. They are being used increasingly in a wide range of real world applications. The superior functionality of Neural Networks (NN) to derive meaning from complicated data could be used to extract patterns and detect trend that are too complex to be noticed by either human or other computer techniques. This project presents the Neural Network techniques to provide solutions in the color images recognition area. The application produces a substantially better color measurement than what the human can do. It is designed to find that one in a hundred or one in a thousand part that is defective. These methods are well known in academic, laboratory applications, and much other real world matters. The Neural Networks has been shown successful at recognizing targets. The author hopes that the effort in presenting this project will promote a better understanding of the foundation of neural computation and stimulate further development.