Image Processing and IoT-based Fish DiseasesIdentification and Fish Tank Monitoring System

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Abstract

Every person has their way of relaxing and having fun. The most well-liked approach to do it is to own a pet. When most individuals work from home and anxiety levels are high, people have certain restrictions on going outdoors and engaging in activities due to the existing COVID scenario. Consequently, we developed a product called AquaScanner. The problems that come with the aquarium environment can all be handled by our product. Our product primarily consists of an application that can regulate and monitor aquarium tanks by regulating feeding routines, fish disease detection, and water quality moni- toring. The AquaScanner focuses on recognizing two significant illnesses, Fin Rot and Fungi bacteria, under the heading of disease identification. Additionally, the product will recommend treatments for the illness and provide two distinct methods for feeding the fish manually and automatically through the application. The AquaScanner can regulate feeding operations. Also, AquaScanner can independently monitor all key water parameters as part of the water quality measurement system. A user-friendly interface connects these three key elements. Owners of aquariums may manage and keep an eye on their beloved aquariums from anywhere in the world.

Keywords

Fin Rot, Fungi, Water Quality