ABSTRACT

A novel way of classifying shark fish, it is based on image processing using various edge detection techniques for detecting the edges, specially the two dimensional Haar wavelet transformation of images. In this work firstly it deals with the morphological features of different types of sharks compared with the given sample shark that is being identified.

Applying the wavelet transformation which incorporates the concept of multi-threading. The work proposes the enhanced edge detection technology and uses the concept of concurrency to identify the shark image. In another dimension this work deals with detecting the age of the fish through its morphological features using image processing. The body length of the fish is calculated through which the age of the fish is calibrated. The length of the fish is being calculated using edged detection technology.

In this work it uses the edged detection algorithm, mainly Sober Filter and Gabor Filter. Gabor filter for texture, projection segmentation and geometrical shape feature extraction to find the fish’s distinctive dark lines that mark the body and tail, through which the age of the fish can be computed. Finally very important problem is taken to understand the fundamental concepts of various filters and apply these filters in identifying a shark fish type which is taken in this work. In this work the edge detection techniques are taken for consideration. This work was implemented using MATLab.