CHAPTER 8

CONCLUSION AND FUTURE EXPANSION

Medical Images and Radiographic images have been analyzed for defects using Texture features and algorithms and the results are satisfactory and encouraging. This system can be used as a tool for identification of defects in uniform textures. Defect detection efficiency of 95% has been achieved.

Various features extracted are:

- Statistical Pixel-Level (SPL) Features.
- Area and perimeter of the structures present in the image.
- Compactness
- Texture Features provide information about the local texture within the region.
- Mean- average intensity .
- Standard deviation- average contrast.
- Relative Smoothness.
- Uniformity.
- Entropy- measure of randomness.
- Fractal measures:
- Hurst coefficient.

- Distance parameter that calculates the distance of exudates from macula.

Several textural features have been extracted from the test images and so the results are encouraging and satisfactory.

The proposed system identifies and analyzes the defects in uniform textures. It can be used as a tool for real-time applications. Future work includes experiments with other wavelet transforms to select the best wavelet bases which may improve the defect detection efficiency and reduce the processing time. Investigation is going on to include additional textural features so that it may find applications in Forest Fire Detection, Remote sensing and other Medical Applications.