Abstract

Oral cancer is a significant health problem throughout the world. It is very important to detect such types of cancer at an earlier stage than the later stage where the treatment becomes unsuccessful. Early detection helps surgeons to provide necessary therapeutic measures which also benefit the patients. In this paper, a technique is proposed to detect cancers present in mouth provided by an Orthopantomogram. A novel mathematical morphological watershed algorithm is proposed to preserve these edge details as well as prominent ones to identify tumors in dental radiographs. Applying watershed on images leads to oversegmentation even though it is preprocessed. To avoid this, Marker Controlled Watershed segmentation is used to segment tumors. The results obtained are quite good and were tested.

References

- A. Banumathi, J. Praylin Mallika, S. Raju, V. Abhai Kumar, "Automated Diagnosis and Severity Measurement of cyst in dental X – ray images using Neural
Detection of Oral Tumor based on Marker – Controlled Watershed Algorithm


Index Terms

Computer Science

Pattern Recognition

Keywords
Orthopantomogram  Oversegmentation  Marker controlled watershed segmentation