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INFORMATICS INSTITUTE OF TECHNOLOGY

In Collaboration with

UNIVERSITY OF WESTMINSTER

# **Oral Cancer Detection System Using Image Processing**

A dissertation by

Mr.A.K.Ahamad Adhham

Supervised by

Ms. Sapna Kumarapathirage

Submitted in partial fulfilment of the requirements for the BEng/BSc in Software Engineering degree at the University of Westminster.

**May 2021**

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## Abstract

Oral cancer is one of the most dangerous disease in world. We can see raising number of patients in Sri Lanka. Tobacco and smoking are main factors oral cancer. This oral cancer affects the oral cavity in the mouth. Test for the oral cancer diagnose is very painful and costly. Early diagnose of oral cancer will increase the survival rate. Computer vision or image processing will help to do the early diagnose of oral cancer without pain.

This application will help to detect the oral cancer using image processing. Patient or physician can test their oral cavity with an image without pain. This application will use machine learning machines to predict the Oral cancer. This application will detect that lesion or patch is a cancerous. If lesion or patch is cancerous it will categorise that lesion or patch. This application mixed of pre-processing, libraries, algorithms and validations. This application two main machine learning models which trained and evaluated models.

This application is develop with Python language. This application is well designed and structured. This application will use RGB image to detect the Oral Cancer. This application is developed with 3 main libraries, 2 machine learning model and 4 algorithms. It is easy to use and test the lesion.

**Keywords:** Oral Cancer, Medical Image processing, Image Processing, Machine Learning, Python.