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(57) Abstract:

ABSTRACT The present disclosure introduces an AI based device to detect mouth cancer 100 for the early detection of oral squamous cell carcinoma (OSCC). Utilizing a 360 Degree Camera, the device captures high-definition images of the oral cavity, providing comprehensive coverage for analysis. It comprises of 360 Degree Full HD Camera 102, Image Dataset 104, Device Interface 106, Data Split-up Module 200, Training Images 202, Validation Images 204, Testing Images 206, Data Pre-processing Module 300, Data Augmentation 302, Data Pre-processing 304, Training and Classification System 400, Deep Learning Algorithms 402 and Trained Model 500. This compact and portable device offers a non-invasive and efficient means of oral cancer screening, empowering healthcare professionals with timely diagnostic insights for improved patient outcome.

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