Department of Electrical and Computer Engineering

North South University

Senior Design Project

WEB APPLICATION FOR MONKEYPOX DISEASE DETECTION USING DEEP LEARNING

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DECLARATION

This is to certify that this project is our original work. This work has yet to be submitted elsewhere, partially or entirely, for the award of any other degree or diploma. Any material reproduced in this project has been adequately acknowledged.

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ABSTRACT

The monkeypox virus might become the next big pandemic, like the COVID-19 pandemic, if it is not monitored and controlled correctly. Monkeypox has some similarities to measles and chickenpox, making it very hard to test for it and give a diagnosis in the early stages. A polymerase chain reaction (PCR) test must be used to test for monkeypox properly. This study aims to detect monkeypox accurately using some popular deep-learning models and then compare the results. We used the "Monkeypox Skin Lesion Dataset (MSLD)." Data augmentation has been done to the data to increase the number of images. A web-based prototype application is to be developed where an image can be uploaded, and a prediction will be given if the image is either monkeypox or not. The model used in the web application is the VGG-16 model which identifies monkeypox images with an accuracy of 99%.