## **ABSTRACT**

Abstract of project presented to the Senate of Management & Science University in partial fulfillment of the requirements for the degree of Bachelor in Computer Science (Hons).

## ANDROID BASED INDOOR AIR MONITORING SYSTEM USING IMAGE PROCESSING

Lulung Satrio Prayuda

May 2022

## **Faculty: Information Sciences And Engineering**

The application for monitoring the air quality app using image processing on an android basis has become a system that is in accordance with existing requirements, this application is successful, this application successfully runs as it should and produces the results of the processing of images uploaded by users. The reason this application was made is because to help some people measure air quality in the room using Android without using hardware such as Arduino Uno sensors and various other support tools where this will make users spend even more money, and the advantages of this application is a process that looks complicated but easy to use by the user. And it doesn't take long to produce the results of the air quality analysis using this image processing, but this application has a dependence on the level of accuracy where the level of accuracy depends on the sample data used which is a weakness that is quite challenging for developers because the data needed to The sample data that will be trained is 500 images, but I have collected 652 images in total from all categories. And the accuracy is also influenced by the quality of the image uploaded from the gallery or the quality of the image captured from the user's camera. I hope this application can help the user in knowing the quality of the air in the room