



**WEB-BASED ATTENDANCE MANAGEMENT SYSTEM WITH FACIAL RECOGNITION AND AREA
DETECTION**

UNDERGRADUATE THESIS

Submitted as one of the requirements to obtain

Sarjana Komputer

By:

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**FACULTY OF COMPUTING
INFORMATICS STUDY PROGRAM**

CIKARANG

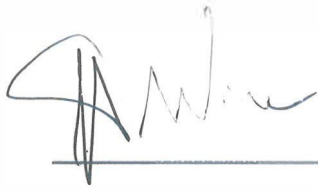
JUNE, 2020

**Web-Based Attendance Management System with Facial
Recognition and Area Detection**

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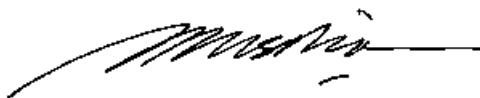
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ABSTRACT

Manual attendance is inefficient, and signatures are often used as proof of attendance, which can be stolen or lost. A system that can eliminate these problems is needed. Developers want to record attendance flexibly, monitor activity, and use face recognition and area detection to prove attendance. This final project's main point is to create a web-based application that makes it easy for users to record and monitor attendance from anywhere and at any time with an attendance system that uses face recognition and area detection. The methodology used is Rapid Application Development. The developer prioritizes requirements and constructs a website prototype with fully functional functionality. The user can give input during this process to ensure the application corresponds with the client. If all goes according to plan, the prototyping process will be repeated. Finally, the developer tests, updates, and adds features to the application before it is sent to the client. The conclusion is that this application has been tested, and the results are what is expected, such as the user can do face recognition, and the system can detect user location. The application is generally in line with expectations. This web-based e-commerce attendance management system uses face-api.js and geolocation API as the main feature for recording attendance.

DEDICATION

In particular, I want to dedicate my work to my parents and my family. They instilled a love of learning in me and made sacrifices to make sure that I had access to an excellent education from a young age.

ACKNOWLEDGEMENT

I am very appreciative of my parents' love, support, and encouragement as well as for being there for me through every stage of my life and I want to thank to my supervisor, Prof. Dr. Ir. Wiranto Herry Utomo, M.Kom, for his assistance and direction. I'm appreciative of his wise counsel and recommendations. I additionally want to thank my colleagues for pushing me to complete this project on time.

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