

**IMPLEMENTATION OF FACE RECOGNITION WITH
LOCATION TRACKING IN A WEB-BASED EMPLOYEE
ATTENDANCE SYSTEM**

UNDERGRADUATE THESIS

**Submitted as one of the requirements to obtain
Sarjana Komputer (S.Kom.)**

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**FACULTY OF COMPUTING
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PRESIDENT UNIVERSITY
CIKARANG, BEKASI
September, 2023**

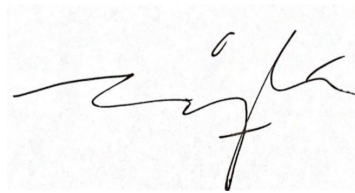
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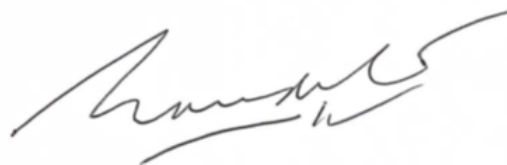
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ABSTRACT

This report presents the results of the final project, which aims to implement the application of face recognition and employee location in a web-based employee attendance system. The employee attendance system is an essential component in company management related to discipline, performance, and decision-making.

In this project, the authors design and develop a web-based employee attendance system using the Laravel framework, which supports programming languages such as HTML, CSS, and PHP. This system uses facial recognition technology to identify employees and ensure accuracy of attendance. In this system, each employee will have facial biometric data registered in the database. In addition, the author integrates employee location information by using the input latitude and longitude data to verify employee presence.

The author's system can provide essential features such as monitoring and tracking employee attendance, generating attendance reports, calculating performance percentages, and graphing visualization of performance rankings for all employees. This system provides benefits in increasing the efficiency of attendance management and employee discipline.

During the development process, the author conducted tests covering the reliability of face detection and the accuracy of location information. The test results show that the system can recognize employees' faces and provide sufficient location information to ensure good attendance.

Through this project report, the authors describe the detailed steps in designing, implementing, and testing a web-based employee attendance system with the application of face recognition and employee location. This report also includes an analysis of successful implementation, challenges faced, and future development and improvement recommendations.

Keywords: Employee Attendance System, Face Recognition, Location Tracking, Web-based, Laravel.

DEDICATION

I dedicate this final undergraduate project to God Almighty Allah Subhanahu Wa Ta'ala and Prophet Muhammad Shalallahu Alaihi Wassalam. My beloved dear mother, Ainah. The man of my life, my father, Ahmad Rusdi, and my support system whom I dearly love and am proud of, Muhammad Safri Rizky, Pritta Ayu Khoirunnisaa, Levita Revalina, Tasya Maharani, and all my friends who have given me endless love and support throughout my life.

And for a set of beautiful souls and human beings, Kim Namjoon, Kim Seokjin, Min Yoongi, Jung Hoseok, Park Jimin, Kim Taehyung and Jeon Jungkook, whose impact on my life goes beyond measure. Who helped me through my hardest times. Your music has provided comfort and solace during my darkest moments, reminding me that I am not alone in my struggles. I am grateful for the laughter, tears, and joy you have brought into my life. Finally, I dedicate it to myself for successfully completing this final project.

ACKNOWLEDGMENTS

Praise *Allah SWT*, who has given me grace and convenience to complete my final project. I would like to express my deepest gratitude and appreciation to the following individuals whose unwavering support and guidance have been instrumental in the completion of this Final Project:

1. Our beloved prophet, ***Muhammad SAW***, became my inspiration.
2. I am grateful to **Mrs Cutifa Safitri, Ph. D**, as my head of IT study program, my lecturer, and my internship advisor for giving me the opportunity to work with him and for continuous support, encouragement, and invaluable guidance.
3. I sincerely thank my advisor, **Mr Ronny Juwono, S. Pd., MT**, for their invaluable guidance, expertise, and constant encouragement throughout this project. I benefited a lot from his guidance.
4. I extend my heartfelt appreciation to my parents, **Ainah** and **Ahmad Rusdi**, for their unconditional love, endless encouragement, and sacrifices they have made to provide me with the best education. Their belief in my abilities has been a constant source of motivation, and I owe my success to them.
5. I am immensely grateful to **The Dean, Lecturers** and **Computing faculty** members for their knowledge, mentorship, and dedication to providing a nurturing academic environment. Their commitment to excellence has contributed significantly to my growth as a researcher.
6. All my **dearest friends**, for their love, prayers, and support.
7. All **Computing 2019** who have accompanied me during the three years of my university life.

Finally, I would like to express my deep gratitude to all the participants who generously shared their time and insights for this project. Without their contributions, this project would not have been possible.

Once again, I extend my sincere appreciation to everyone who has contributed to the completion of this project. Your support and encouragement have made a significant difference, and I am truly grateful.

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