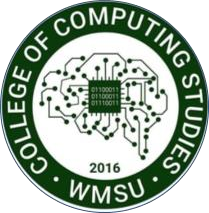
**Republic of the Philippines  
Western Mindanao State University  
COLLEGE OF COMPUTING STUDIES  
DEPARTMENT OF INFORMATION TECHNOLOGY**

**Zamboanga City**

# **FINQUANT: A MOTION RECOGNITION-BASED FISH COUNTING APPLICATION**

A CAPSTONE PROJECT

Presented to the Faculty of the College of Computing Studies

Western Mindanao State University

In Partial Fulfillment

Of the Requirements for the Degree

Bachelor of Science in Information Technology

By

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Adviser

July 14, 2023



WESTERN MINDANAO STATE UNIVERSITY

Zamboanga City, 7000 Philippines

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**CERTIFICATE OF PANEL APPROVAL**

The Capstone Project, attached hereto, entitled **“FINQUANT: A MOTION RECOGNITION-BASED FISH COUNTING APPLICATION”,** prepared and submitted by **CHERRY LOU O. ARAT, CRISTON JADE B. ENOLPE, RENEL JOY LADAO** in partial fulfillment of the requirements for the degree **BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY,** is hereby recommended for approval.

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Date

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Member Date

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This Capstone Project is approved in partial fulfillment of the requirements for the degree **BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY**

**JOHN ED AUGUSTUS A. ESCORIAL, MIT**

Department Head, IT

**DR. RODERICK P. GO**

Director, ICS

Date

Date

**DEDICATION**

This effort serves as proof of the numerous and laborious sacrifices that have been accomplished. The dedicated researchers would like to extend their sincere appreciation to those who have provided them with unwavering love and support. A heartfelt acknowledgment extends from the nurturing care of our parents to the consistent encouragement provided by our close circle of friends. Throughout periods of success and difficulty, these people have not only served as pillars of encouragement but also a source of motivation that propelled our efforts. We extend our heartfelt gratitude for the invaluable support provided by our loved ones, whose unwavering commitment has had an enormous impact on the development of this project.

Above all, we express our utmost gratitude to the Almighty God for giving His blessings, which have provided us with the strength and understanding required to conduct this research.

**ACKNOWLEDGEMENT**

We extend our sincere gratitude and appreciation to all those who have contributed to the successful completion of this project. This work has been shaped by the support, encouragement, and guidance of people, and we wish to express our heartfelt thanks.

First and foremost, we would like to acknowledge the unwavering support of our families and parents, whose love and encouragement have been constant sources of our strength, we truly appreciate the sacrifices they have made for us.

Our deepest thanks also go to our close friends and colleagues for making this journey enjoyable. Your assistance and support were crucial to the accomplishment of this project.

We also extend our sincere appreciation to our respected advisor, Ms. Ceed Jennelle Lorenzo, who generously shared her knowledge and insights, contributing to the intellectual richness of this work.

Finally, we acknowledge the Almighty God for His blessings and grace, which have been the guiding force behind our efforts. The divine support has provided us with the resilience, wisdom, and determination needed to navigate challenges and persevere in our pursuit of knowledge.

**EXECUTIVE SUMMARY**

FinQuant is a revolutionary mobile application designed exclusively for small businesses in the fish industry, offering an innovative solution to simplify fish detection and counting. With a focus on ease of use and accuracy, FinQuant transforms the way fish sellers manage their inventory, ensuring a streamlined and efficient process for businesses of all sizes.

This project aims to provide instant fish recognition through a smartphone camera in order to save time from manual counting and tedious inventory management. The application automates the counting process, allowing small businesses to effortlessly track their fish stock in real-time. The user-friendly interface ensures accessibility for all, while the enhanced accuracy of the application prevents counting errors and facilitates informed decision-making regarding restocking and sales strategy.

In conclusion, FinQuant stands as a transformative solution for small enterprises, reshaping the landscape of fish management in an era where efficiency is important. With its cost-effective approach, simple user interface, and precise fish detection capabilities, FinQuant emerges as an important device for fish vendors. This project not only simplifies the intricate process of fish counting but also empowers enterprises to elevate their operations to an unprecedented degree.