**The University of Nottingham**

**Faculty of Engineering**

**Department of Electrical and Electronic Engineering**



**WellnessAI+: Elevating Mental, Emotional and Physical Health with ECG-Enhanced Artificial Intelligence**

AUTHOR : KOAY XIAN CONG

ID : 20418760

SUPERVISOR : DR HERMAWAN NUGROHO

MODERATOR : PROF T. NANDHA KUMAR

DATE : 1 APRIL 2024

Third year project thesis is submitted in partial fulfilment of the requirements of the degree of **Bachelor of Engineering**

# Acknowledgement

I want to express my heartfelt gratitude to all those who have contributed to the completion of this Final Year Project.

First and foremost, I extend my deepest appreciation towards my supervisor, Dr Hermawan Nugroho, for his invaluable guidance, support, and motivation throughout this entire project. I have received tremendous knowledge and aid from his insightful advice as I carried out the project.

I am also thankful towards my moderator, Prof T. Nandha Kumar for his invaluable feedback and encouragement in ensuring my project is moving in the right direction.

I would also like to extend a word of appreciation towards the Department of Electrical and Electronics Engineering at the University of Nottingham Malaysia, for providing this hands-on opportunity with the necessary knowledge and skills to undertake this project. The project has been enjoyable yet challenging, with each challenge and difficulty presenting opportunities for growth in both technical and intellectual aspects.

I would like to acknowledge the support of my family for their unwavering encouragement and understanding during this academic journey. Their love, encouragement, and belief in my abilities have been a constant source of motivation.

Special thanks go to my friends and classmates for their continuous support, constructive discussions, and words of encouragement, which have helped me overcome challenges and stay focused on my goals.

Thank you all for being part of this journey and for your contributions to this thesis.

# Abstract

# Table of Contents

[Acknowledgement 1](#_Toc159279291)

[Abstract 2](#_Toc159279292)

[Table of Contents 3](#_Toc159279293)

[1. Introduction 4](#_Toc159279294)

[1.1 Background 4](#_Toc159279295)

# Introduction

In this initial segment of the paper, the background, problem statement, proposed solution, objectives, anticipated outcomes, project scope, importance of study and project timeline will be discussed. Additionally, the thesis outline is provided at the end.

## 1.1 Background