

Universiti Teknologi Mara

Age Detection from Face Using Convolutional Neural Network (CNN)

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**Thesis submitted in fulfilment of the requirements for Bachelor of
Computer Science (Hons.)**

College of Computing, Informatics and Mathematics

January 2024

ACKNOWLEDGEMENT

Alhamdulillah, praise and thanks to Allah, who is Almighty and gave upon me the greatest rewards, I completed this research in the time given to me. To everyone who gave me the chance to finish this report, I would like to thank you and show my appreciation. Firstly, my special thanks goes to my supervisor, Encik Mohd Hanapi Bin Abdul Latif, for investing the time necessary to encourage ideas and offer direction to finish the report. Special appreciation also goes to my beloved parents, for their continuous backing and support while I finished the project. I would like to express my gratitude to the course lecturer, Madam Ummu Fatihah Binti Bahrin, for providing me with the guidance and explanations I required to complete this project. Last but not least, I would like to give my gratitude to my dearest friends, especially my closest friend, who is a student in UNITEN right now, for their willingness to exchange ideas and encourage me to finish this project report.

ABSTRACT

Face-based age recognition has significant effects for a variety of purposes, including personalised services and security measures. The capacity to reliably estimate a person's age using facial traits is critical in improving user experiences and security processes. In this project, we want to create an age identification system that uses Convolutional Neural Network (CNN) algorithms to estimate people's ages fast and accurately from facial images. Following a thorough examination of numerous algorithms, CNN was determined to be the best effective method for age recognition from facial features due to its ability to automatically extract important data. The CNN model is thoroughly trained and analysed on various kinds of datasets containing facial photos of different ages. The results show a high 85% accuracy rate in determining the age of individuals. A user-friendly desktop system is created for input of facial photos and receiving immediate age estimation results, illustrating machine learning's assure in age identification. With implications for personalised services and security, this experiment demonstrates how CNN algorithms improve accuracy, adding to successful age-related technology.

TABLE OF CONTENTS

CONTENT	PAGE
SUPERVISOR APPROVAL	i
STUDENT DECLARATION	ii
ACKNOWLEDGEMENT.....	iii
ABSTRACT.....	iv
TABLE OF CONTENTS.....	v
LIST OF FIGURES	viii
LIST OF TABLES.....	ix
CHAPTER ONE	11
1.1 Background of Study.....	11
1.2 Problem Statement	13
1.3 Objective of the Project.....	14
1.4 Project Scope.....	14
1.5 Project Significance.....	15
1.6 Overview of Research Framework.....	16
1.7 Conclusion.....	17
CHAPTER TWO	18
2.1 Image processing.....	18
2.2 Age Detection	19
2.3 Similar Works Based on Age Detection	20
2.4 Convolutional Neural Network (CNN) Algorithm.....	26
2.4.1 Convolutional Neural Network (CNN) and How Does it works.....	26
2.4.2 Implementation of CNN	27
2.4.3 Advantage of Convolutional Neural Network (CNN).....	28
2.5 Implementation of CNN in various problem.....	29

2.6 The Implication of Literature Review	35
2.7 Conclusion.....	36
CHAPTER THREE	37
3.1 Overview of Research Methodology.....	37
3.1.1 Detailed Content of Research Framework.....	37
3.2 Preliminary phase.....	40
3.3 Literature Review	40
3.2.1 Data Collection	41
3.3 System Design.....	42
3.3.1 System Architecture.....	42
3.3.2 Flowchart	43
3.3.3 Pseudocode	44
3.3.4 User interface.....	45
3.4 System Requirement	46
3.5 Evaluation.....	47
3.5.1 Accuracy of the algorithm	47
3.6 Gantt Chart	49
3.7 Conclusion.....	50
CHAPTER FOUR.....	51
4.1 Conceptual Framework.....	51
4.2 Results for Objective 1.....	52
4.2.1 Analysis of Literature Review on CNN Algorithm.....	52
4.2.2 Dataset Preprocessing.....	53
4.3 Results for Objective.....	58
4.3.1 Input Representation.....	58
4.3.2 The Implementation of CNN Algorithm.....	58
4.3.3 Program Codes for Algorithm	59