FACIAL KEY POINTS DETECTION SYSTEM



A Thesis report presented to the National University in partial fulfilment of the requirement for the degree of M.Sc.(Master's) in Computer Science & Engineering

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DECLARATION

I hereby declare that I have completed the work of this thesis under the supervision of Ditee Yasmeen, Assistant Professor, Department of Computer Science and Engineering (CSE), Institute of Science and Technology (IST), affiliated with the National University of Bangladesh. I also declare that neither this thesis nor any part of this has been submitted elsewhere for the award of any degree.

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APPROVAL

The thesis "Facial Key Points Detection System" submitted by Md. Ikramul Murad, Registration No: 15602000014 to the Department of Computer Science and Engineering, Institute of Science and Technology (IST), Dhaka, Bangladesh has been accepted as satisfactory for the fulfillment of the requirements for the Degree of Master of Science in Computer Science and Engineering under National University and approved as to its style and contents.

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Abstract

This paper gives the intersection between the vision based and knowledge based facial key points detection system which will be used in several modern world applications. It undertakes two primary tasks; namely understanding of the traditional vision based system provided by the OpenCV and a proposed methodology to make them more accurate in facial key points detection. The methodology uses both vision and knowledge for the facial key points detection procedure. This system can be used as a building block in several applications, such as Track faces in images and videos, Analyzing facial expressions, Detecting facial signs for medical diagnosis, Biometrics etc. This paper provides a generalized solution for facial key points detection system for the field of modern applications.

Table of Contents

Chapter 1: Introduction

Page No.

1.1	Introduction	02
1.2	Motivation	02
1.3	Objective	02
1.4	Scope of the Work	02
1.5	Outline of the Thesis	03

Chapter 2: Literature Review

2.1	Introduction	05
2.2	How Facial Key Points can be Detected?	05
2.3	Existing Key Points Detection Algorithms	05
	2.3.1 Advantages.	05
	2.3.2 Disadvantages.	06
2.4	Machine Learning, Deep Learning and Convolutional Neural Network	06
	2.4.1 Machine Learning.	06
	2.4.2 Deep Learning.	06
	2.4.3 Convolutional Neural Network.	06
2.5	Summary	06

Chapter 3: Existing System Overview

3.1	Introduction	08
3.2	OpenCV.	08
3.3	Workflow	09
3.4	Advantages and Disadvantages	10
	3.4.1 Advantages.	10
	3.4.2 Disadvantages.	10
3.5	Summary	10

Chapter 4: Proposed Machine Learning Based Facial Key Points

Detection System

Page No.

4.1	Introduction.	12
4.2	Approach of the Proposed System	12
4.3	Workflow of the Proposed System.	13
	4.3.1 User Perspective.	13
4.4	Features.	13
4.5	Merits of the System.	14
4.6	Required Tools.	14
	4.6.1 Hardware Tools.	14
	4.6.2 Software Tools.	14
4.7	Summary	14

Chapter 5: Conclusion and Future Works

5.1	Conclusion.	16
5.2	Future Works	16

List of Figures

Page No.

Fig 3.1: Image conversion	08
Fig 3.2: LBP method	09
Fig 3.3: Workflow of existing system	10
Fig 4.1: Proposed ML based system	12
Fig 4.2: User perspective workflow	13