



FINAL YEAR PROJECT REPORT

VIRTUAL DRESS TRIALS

In fulfillment of the requirement
For degree of
BS (COMPUTER SCIENCES)

By

**JAHANGIR BUTT
MINHAL KHALID
MISBAH RASHID**

**51865 BSCS
51845 BSCS
53698 BSCS**

SUPERVISED

BY

MA'AM TOOBA MEHTAB

BAHRIA UNIVERSITY (KARACHI CAMPUS)

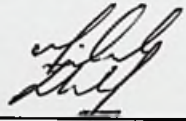
FALL-2021

DECLARATION

We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at Bahria University or other institutions.

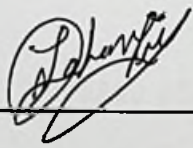
Name : Minhaj Khalid

Reg No. : 51845

Signature :  _____

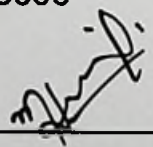
Name : Jahangir Butt

Reg No. : 51865

Signature :  _____

Name : Misbah Rashid

Reg No. : 53698

Signature :  _____

Date : 23rd May 2021

The copyright of this report belongs to Bahria University according to the Intellectual Property Policy of Bahria University BUORIC-P15 amended on April 2021. Due acknowledgement shall always be made of the use of any material contained in, or derived from, this report.

© 2021 Bahria University. All right reserved.

ACKNOWLEDGEMENTS

We would like to thank everyone who had contributed to the successful completion of this project. We would like to express our gratitude to my research supervisor, Miss Tooba Mehtab for her invaluable advice, guidance, and his/her enormous patience throughout the development of the research.

In addition, we would also like to express our gratitude to our loving parent and friends who had helped and given us encouragement.

VIRTUAL DRESS TRIALS

ABSTRACT

Virtual Dress Trials is a software designed as a solution to the problems faced by online shoppers. The main area of this project is machine learning implemented through python which helps to achieve the goals and objective. Human and cloth images are used as a data collection. The purpose of the system is to let customers have an idea of how actual dress will look like on them along. System will First gather the data then extract the features (face) then select a dress and after that generate the human pose then through system mapping of the clothes on human body and at the last final look will be displayed virtually wearing the dress, after this some similar dresses will be shown, and the user can compare the results. This will help the customers, reduce time, and save the amount paid to models.

TABLE OF CONTENTS

CHAPTER

VIRTUAL DRESS TRIALS	I
DECLARATION	II
ACKNOWLEDGEMENTS	V
ABSTRACT	VI
1 INTRODUCTION	1
1.1 Background	1
1.2 Problem Statements	2
1.3 Aims and Objectives.	2
1.4 Scope of Project	2
2 LITERATURE REVIEW	3
2.1 3D Based Avatar.	3
2.2 Web Cameras	3
2.3 Data Taken through TensorFlow	4
2.4 Holograph placebo technique	4
2.5 Photoshop CS6	4
3 DESIGN AND METHODOLOGY	9
3.1 Flow chart:	9
3.2 Design	10
3.3 Modules	10
3.3.1 Age & Gender Classification	10
3.3.2 Virtual Try-on	10
3.3.3 Outfit Suggestion	10
3.4 Methodology	11
3.4.1 Data Gathering	11
3.4.2 Steps To Design the Project	11
3.4.2.1 Planning	11
3.4.2.2 Developing	12
3.4.2.3 Testing:	12

	3.4.2.4 Project flow Diagram	13
3.5	GUI of project	14
4	IMPLEMENTATION	16
5	RESULTS AND DISCUSSION	19
5.1	Testing	19
5.2	Test Cases	20
	5.2.1 Gender Classification	20
	5.2.2 Try-On Module	20
6	CONCLUSION AND RECOMMENDATIONS	21
6.1	Limitations	21
	6.1.1 Gender Classification	21
	6.1.2 Try-On Module	21
6.2	Conclusion	21
6.3	Future Work	22
	REFERENCES	23