INFORMATICS INSTITUTE OF TECHNOLOGY

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6BUIS020C – Final Project Report

Virtual Fitting Room – VirFit

A dissertation by

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Abstract

Huge queues and lines of waiting turn away customers in today's rapidly changing world. The shop's sales are likewise impacted by this. The management of inventory is a major problem when it comes to large retail showrooms. These days, inventory management is a major issue. To manage enormous crowds, businesses must spend a lot of money and hire a lot of people. Customers can virtually test clothes on them without actually trying them on in virtual trial rooms, which can be a solution to all of this. Augmented reality and artificial intelligence can be used to accomplish this. Compared to the conventional method, this one will be quicker and even interactive. The shopkeepers will also benefit from relief from constant folding and unfolding of clothing and be able to keep their items fresh. Additionally, this can more effectively deter stealing.

This project intends to create a virtual fitting room system that enables consumers to virtually try on any kind of clothing over their bodies while viewing it on a screen in front of them. The system is made to be interactive and user-friendly, giving consumers a seamless and pleasurable experience. Augmented reality, machine learning, and application development strategies are all combined in the system's development.

Python Flask and the Python programming language are used to build the system. HTML, CSS, and JavaScript are all used in the development of the user interface. A dataset of client images and apparel from various companies is used to test the algorithm. The database utilised in system development is Mongo DB.

Customers may virtually try on clothing with the system, which reduces the need for physical fitting rooms and enhances the whole shopping experience.