Literature Survey on Virtual Try-On Technologies

Project Overview
The project initiation for a high-resolution 2D Virtual Try-On (VTON) system is centered on developing an advanced solution that significantly improves upon the visual quality of existing virtual try-on technologies. The primary input for this system includes a model image and a piece of clothing the user wishes to try on. Leveraging cutting-edge image processing and generative modeling techniques, the system will generate a high-resolution output where the model appears to be wearing the selected garment. This output aims to offer a more realistic and detailed visualization compared to current offerings in the market. The final virtual try-on product will be displayed on a webpage, providing an accessible and user-friendly interface for consumers to engage with the technology. This project stands out by focusing on delivering a high-resolution experience, addressing one of the major limitations of existing VTON solutions and enhancing the online shopping experience for users.

Existing Technologies and Gaps
While current VTON technologies can simulate clothing try-ons, they may lack realism and detail. Deep learning methods, as demonstrated in the paper, can help overcome these gaps.

Comparative Analysis
Comparative analysis of existing systems with the proposed deep learning-based system will focus on accuracy, efficiency, and visual quality.

Proposed Approach
The project will employ style transfer and GANs to create detailed and accurate try-ons, optimizing for user experience and e-commerce integration.

Papers:

https://ieeexplore.ieee.org/document/9412052

https://ieeexplore.ieee.org/document/10213129

https://www.ijraset.com/research-paper/glass-virtual-try-on

References :

[1] Jetchev, Nikolay, and Urs Bergmann. "The conditional analogy gan: Swapping fashion articles on people images." Proceedings of the IEEE international conference on computer vision workshops. 2017.

[2] Han, Xintong, et al. "Viton: An image-based virtual try-on network." Proceedings of the IEEE conference on computer vision and pattern recognition. 2018.

[3] X. Han, Z. Wu, Z. Wu, R. Yu, and L. S. Davis, "VITON: An Image- based Virtual Try-On Network," in *CVPR*, 2018.