WOXSEN UNIVERSITY

OUTFiTME

Wear Your Style, Virtually!

The Problem: Uncertainty in Online Shopping

1 High Return Rates

Mismatched sizes and unexpected fits lead to frequent returns, causing frustration and financial losses.

2 Limited Visualization

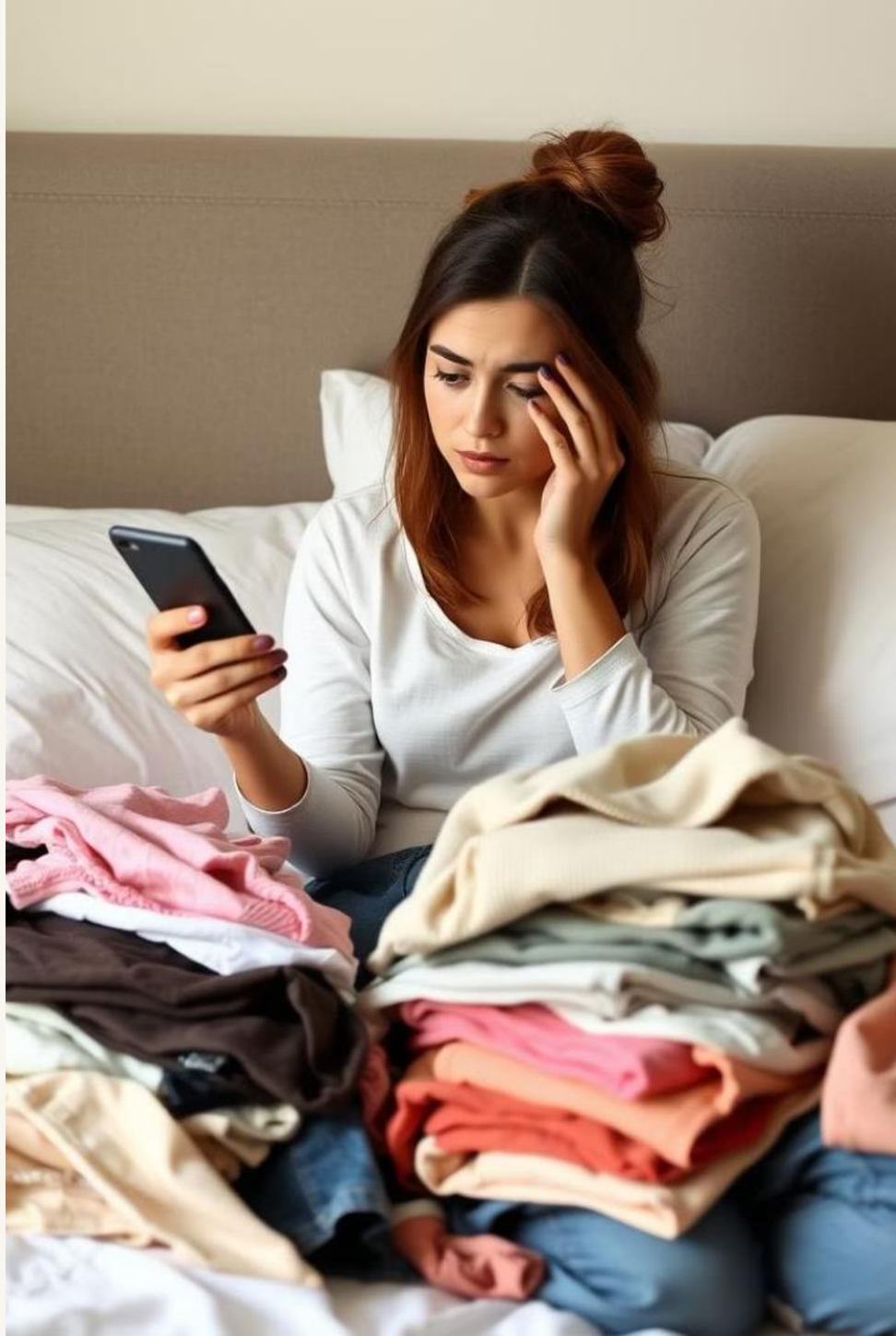
Shoppers struggle to imagine how clothes will look and fit without trying them on.

3 Lost Confidence

Uncertainty hinders confidence in online shopping, particularly for fashion-conscious consumers.

4 Gap in Experience

The difference between physical stores and online shopping creates a significant obstacle for both consumers and retailers.



The Solution: OutFitMe

Virtual Try-On

Users upload or select an avatar and try on clothes virtually, seeing how they fit and look.

AI-Powered Accuracy

Our AI-based image recognition technology accurately maps clothing onto users' body shapes.

Realistic Visualization

OutFitMe provides a realistic view of how outfits will look, eliminating the guesswork and frustration of online shopping.

Technical Foundation

Platform

Flask powers the backend, while HTML, CSS, and JavaScript create a seamless frontend experience.

AI-Powered Virtual Try-On

We integrated CP-VTON, a state-of-the-art virtual try-on network, to accurately map clothing onto body shapes using python.

Database Integration

MySQL securely stores user information, outfits, and try-on data, ensuring smooth functionality across the app.

Key Features of OutFitMe

1 AI-Based Recommendations

OutFitMe suggests outfits based on user preferences, and trending styles.

2 User-Friendly Interface

The app's intuitive design seamlessly transitions between “Try-On” and “Buy Now” options.

3 Custom Image Support

Users can upload images that closely resemble their body shape, ensuring a personalised experience.

4 Real-Time Feedback

The system processes try-on requests instantly, providing a responsive and interactive experience.

Research & Development

Virtual Try-On Technology	CP-VTON architecture utilizes conditional generative adversarial networks (cGANs) to generate realistic try-on results.
Human Parsing	Image segmentation techniques separate body parts for more accurate outfit mapping.
Deep Learning	Research on deep learning and computer vision powers cloth segmentation and image transfer.
E-Commerce Insights	Research on customer behavior guides the development, addressing challenges like clothing returns and the impact of virtual try-ons on sales.

Acknowledgements

CP-VTON Developers

Their open-source code formed the foundation of our virtual try-on system.

Open-Source Community

We are grateful for the freely available machine learning models and datasets.

Our Dedicated Team

Their tireless work modified and customized the solution to fit our application needs.

Future Enhancements

1

AR Integration

We plan to integrate augmented reality (AR) for live try-on experiences, using smartphone cameras to map clothing in real time.

2

Style Prediction

AI-based fashion forecasting will recommend trending outfits based on seasonal changes and global fashion trends.

3

Expanded Product Range

Adding more clothing brands and styles to expand the variety offered on the platform.

4

Enhanced Personalization

Further development of personalized AI-based shopping recommendations, tailoring outfits to user tastes, body types, and preferences.

Thank You