FashionEye

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Fashion today is a global industry, and most major countries have a fashion industry.

Fashion is a constant presence in a person's life but it is not consistent.

As fashion trends change so frequently, some of them are very extreme and opposite to what a person likes.

Recent advances in the artificial intelligence domain and especially in machine learning has led to tremendous collaborative works between the fashion and computer-based designs.

To make fashion more personalized and customer oriented, we introduce.....

FashionEye

Web-application deploying deep learning based model-StyleGAN, that utilizes the input information to generate new clothes, which are trendy and at the same time are derived from the user's style.

FashionEye-UI

- Fashion eye is having straightforward user interface and excellent features.
- We are offering two main features:
  - Generating new styles
  - Try on
- The UI is done in:
  - React.js - a popular OpenSource JavaScript UI library
  - Gradio - an OpenSource python package for creating UI interface for Machine learning models.

Fashion Eye

Fashion Eye

Fashion Eye is a AI based fashion designing web-application that helps users design costumes and virtually try them on to check the fit and dimensions. The web-application takes in two existing designs as inputs and use them to design a new clothing.

Generate a new style now!

↓

Change the seed number to generate different parent design.

Seed 1

100

Seed 2

250

Structure 0.5

Style 0.55

Truncation 0.5

Sleeve & Size 0

Dress - Jacket 0

Female Coat 0

Coat 0

Graphics 0

Dark 0

Less Cleavage 0

Start Layer

3

End Layer

14

Clear

output 0

output 1

Generate style Tryon style

Fashion Eye

Fashion Eye

Fashion Eye is a AI based fashion designing web-application that helps users design costumes and virtually try them on to check the fit and dimensions. The web-application takes in two existing designs as inputs and use them to design a new clothing.

Try out the new style now!

↓

Your image

Dress

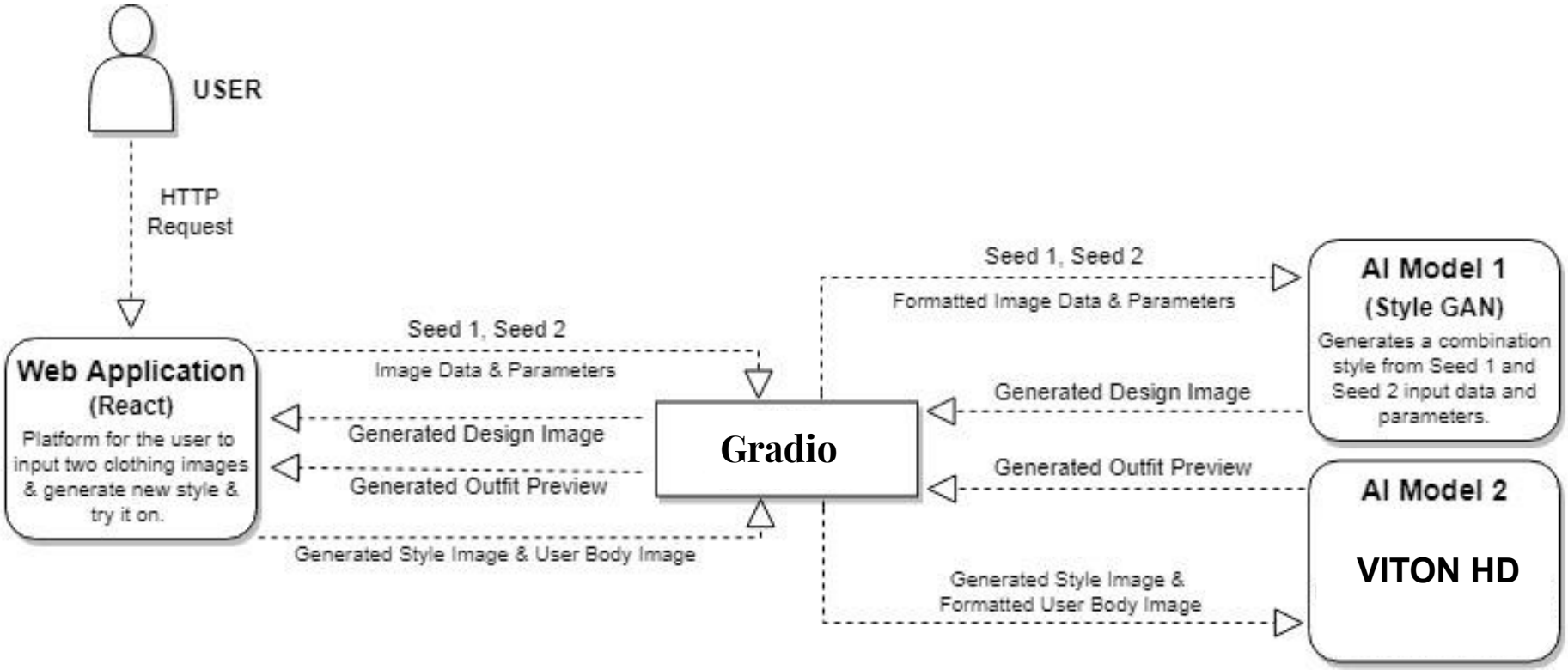
Clear

Submit

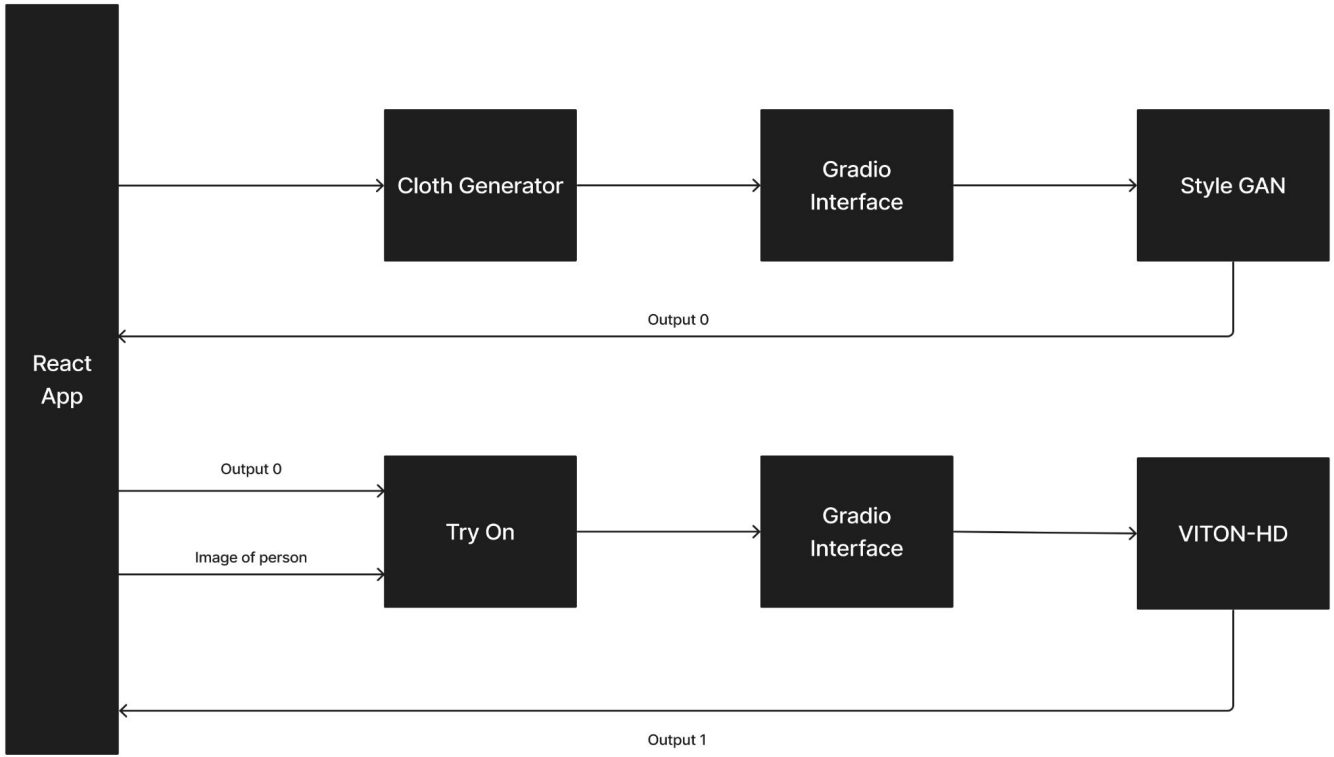
output

Flag

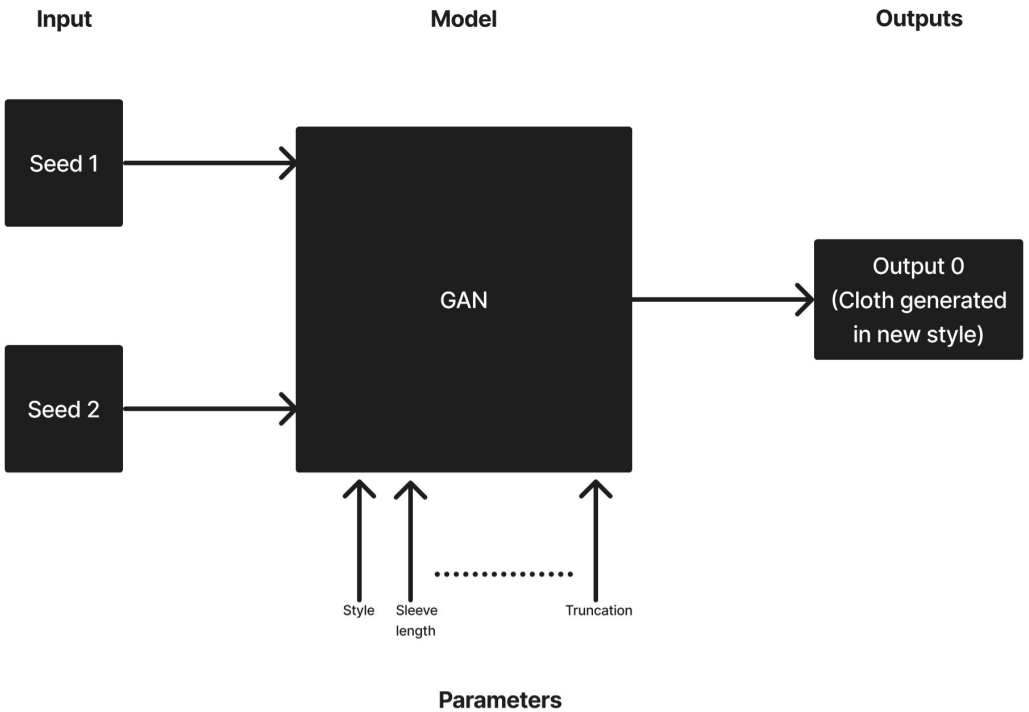
FashionEye-Architecture



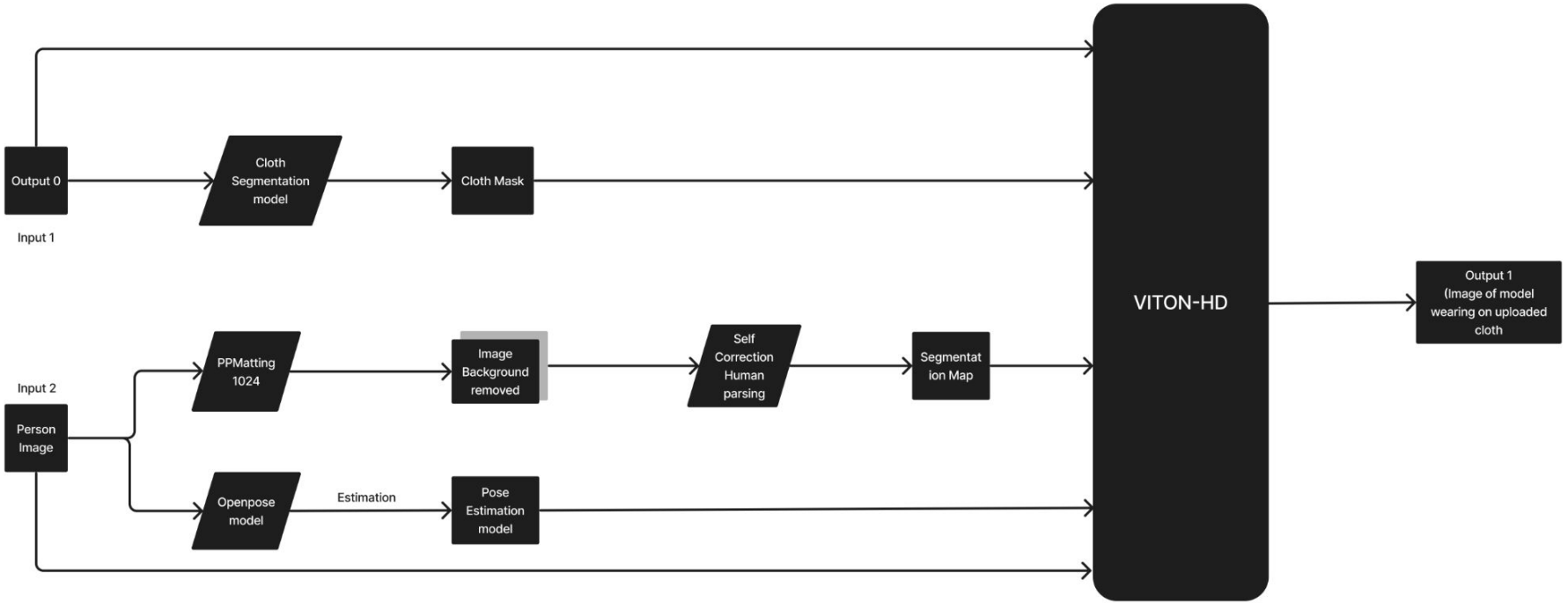
FashionEye-Architecture



FashionEye-Architecture



FashionEye-Architecture



FashionEye-Architecture

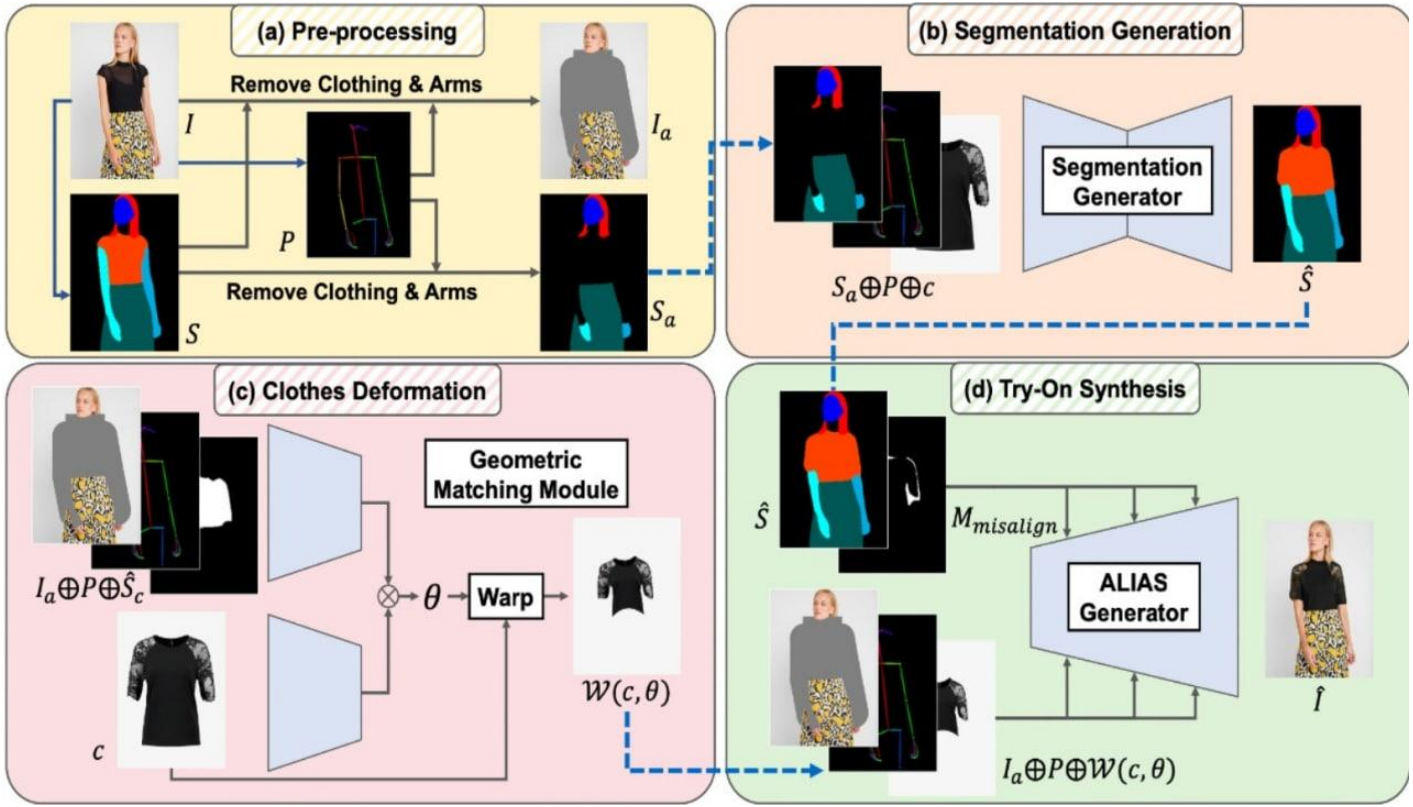
For person

1. Generate foreground mask - PPMatting 1024px/Human Matting(>2048px)
2. Generate segmentation map - U2Net (ResNet-50)
3. Generate pose estimation Openpose

For cloth

1. Generate cloth mask - Cloth segmentation

FashionEye-Architecture



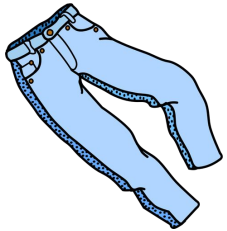
FashionEye-Requirements

1. **Graphics Processing unit**: The system requires NVIDIA TESLA v100 GPU(s) for training and testing. The application requires a hosted runtime backed by NVIDIA TESLA v100 GPU x 1 for inference. The system requires CUDA toolkit v11.3 or greater.
2. **Internet Connectivity**: The system requires uninterrupted internet for system runtime.

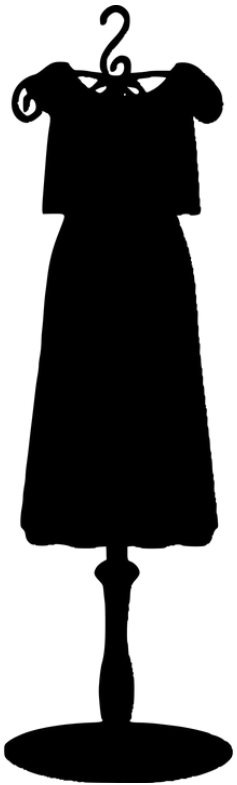
FashionEye-Limitations

1. Our current system do not offer back-end services such as creating and managing a profile, saving history, in-app storage.
2. The model will take up to 1 minute to generate clothing model and the virtual try on. Currently users can only choose from a limited array of cloths for cloth generation.
3. In the future we are planning to implement this model as a reinforcement learning model.
4. Number of features of the generated clothes that can be changed is currently limited to the structural features.

APPLICATIONS

- FashionEye can be used as a blueprint design by the manufacturers to make new clothes.
- Designers can understand what people like and can use their creativity efficiently.
- The Try-on feature of the application will be extensively used for a personalized shopping experience.
- New designs can be generated from existing ones according to the specifications and requirements of the end customer.
- Designers can generate base ideas for their customers which can be further developed using their creativity.



THANK YOU