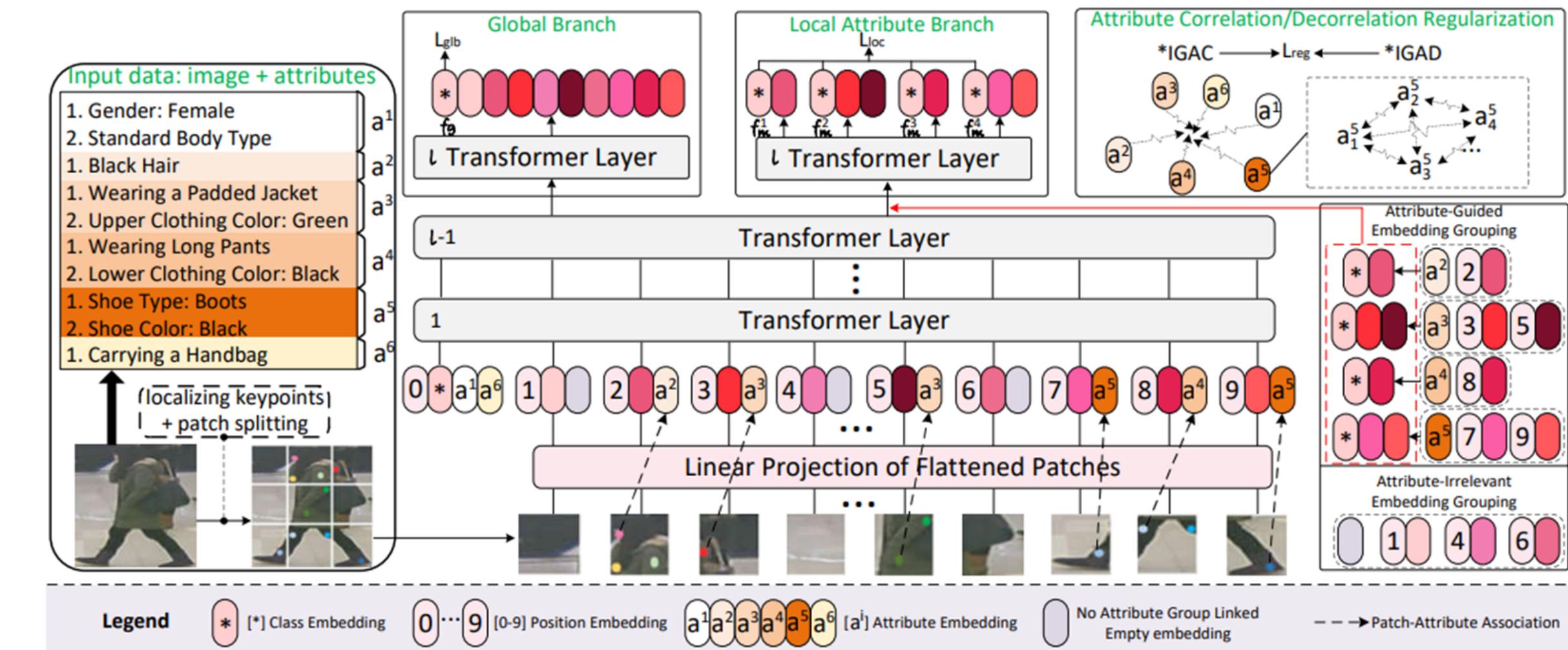


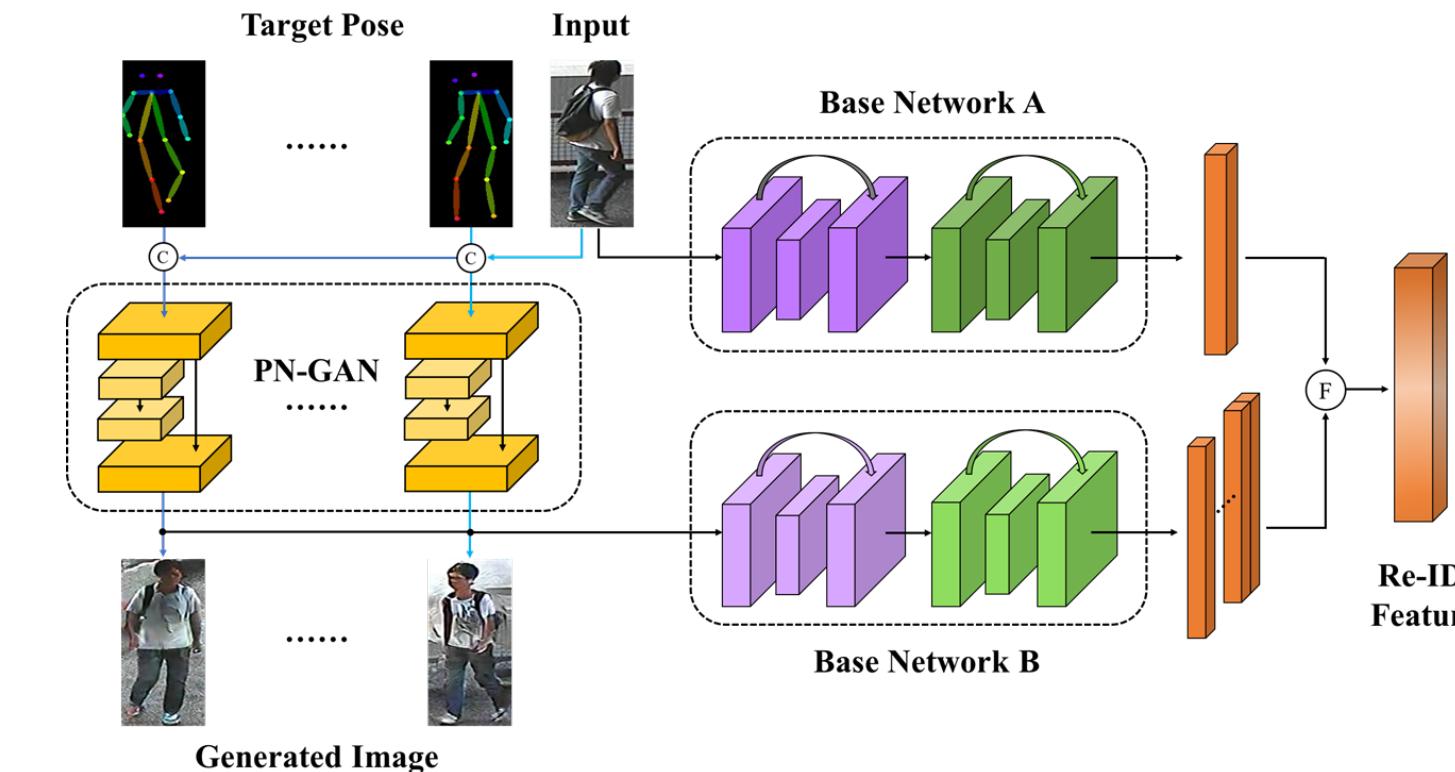
# REID of people in the stream

# Research

## Transformer Feature Board



## Generative pose extraction



# Research

## MLLM

 MLLM → Similar Structure

The person in the image is a woman with blonde hair, wearing a colorful top and black leggings.

The person in the image is a woman with brown hair, wearing a red jacket, grey pants and white shoes. She has a handbag with her.

The person in the image is a woman with long dark hair, wearing a green and white striped jacket, light blue jeans, and white sneakers.

+ 

Template1: With [hair], the [gender] is wearing [footwear], [clothing], [accessory], and carrying [belongings].

Template2: The [gender] is wearing [footwear], [accessory], [clothing], and [belongings]. The [gender] has [hair].

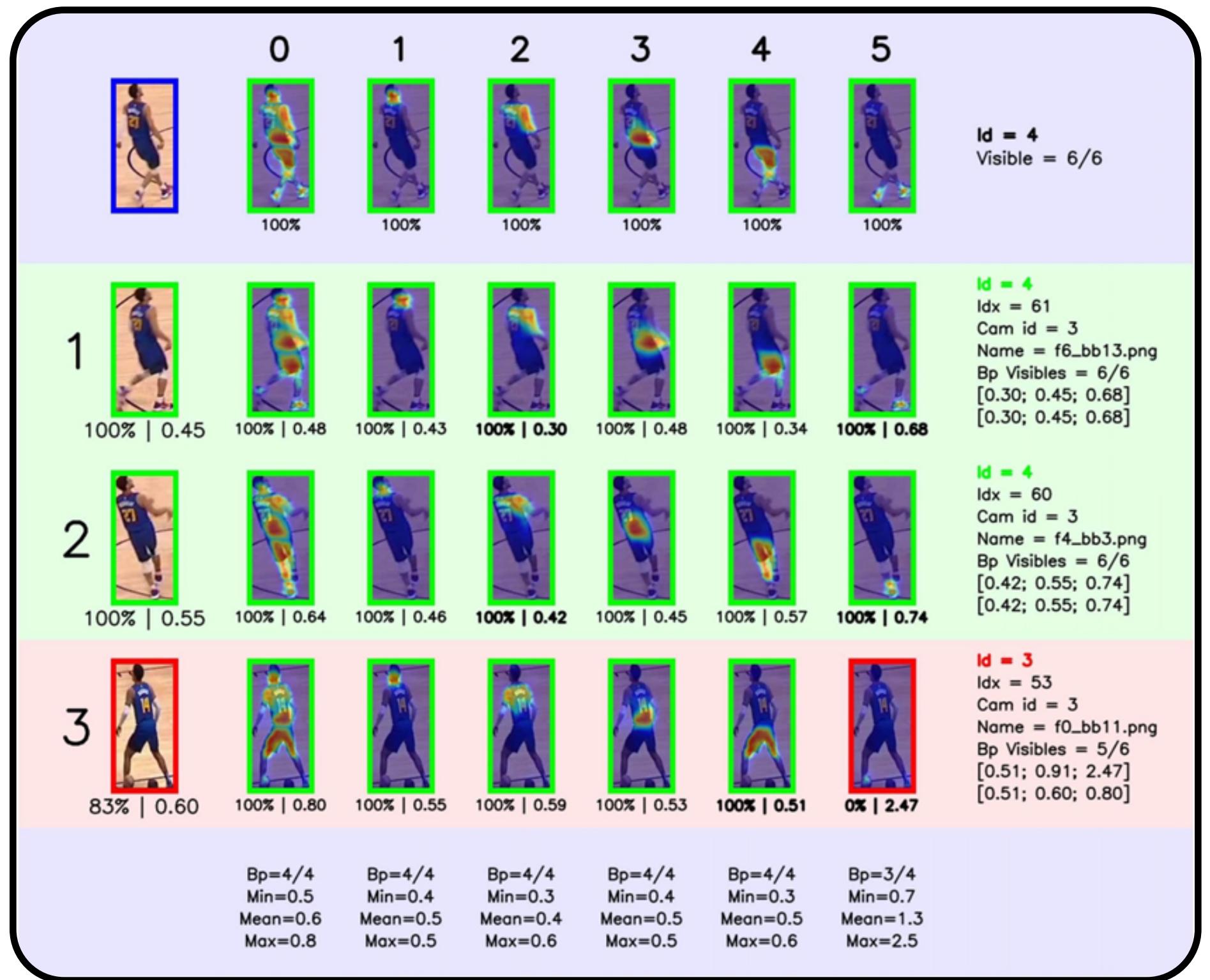
Template3: In [clothing] and [footwear], the [gender] also has [hair].

✓ Diverse Structure → MLLM

With long brown hair, the woman is wearing white shoes, a green and white striped shirt, gray jeans, and a black purse. She is carrying a black purse and is walking down the street.

The woman is wearing sneakers, a blue and white striped shirt, jeans, and a black purse. She has long dark hair.

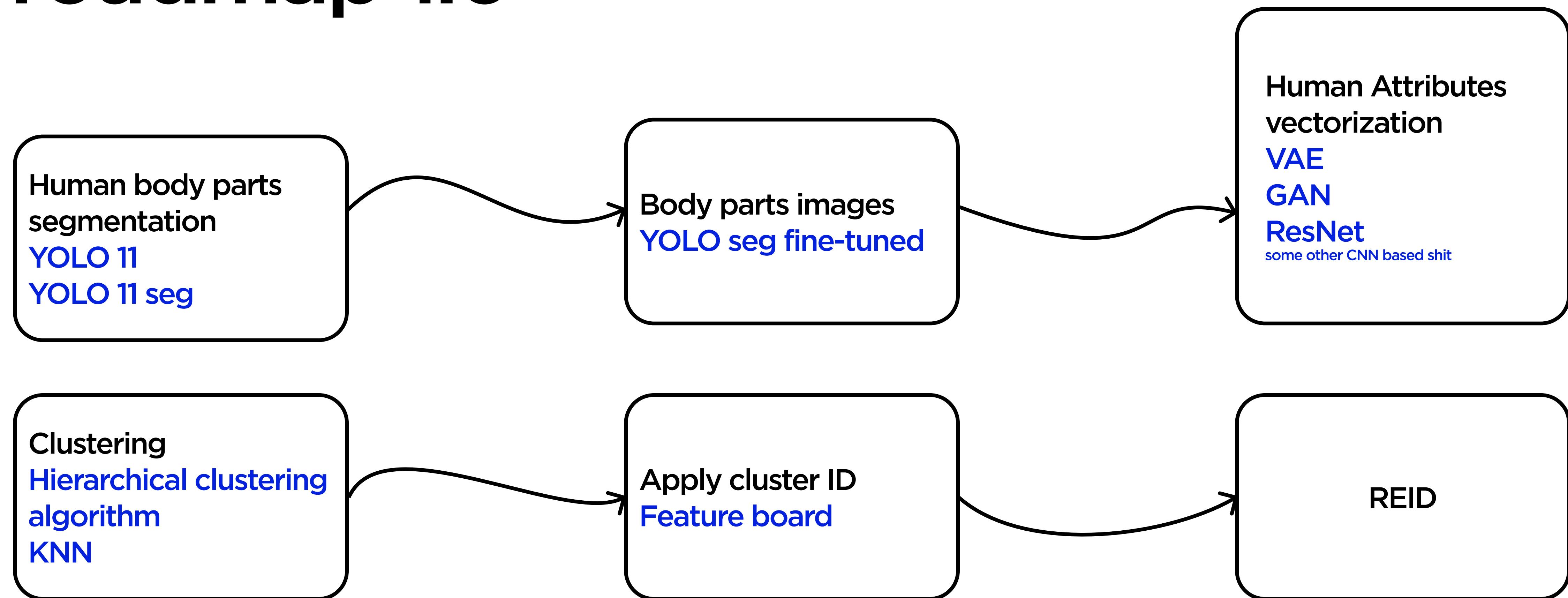
In a green and white striped shirt and gray jeans, the woman also has long brown hair.



## Body parts extraction

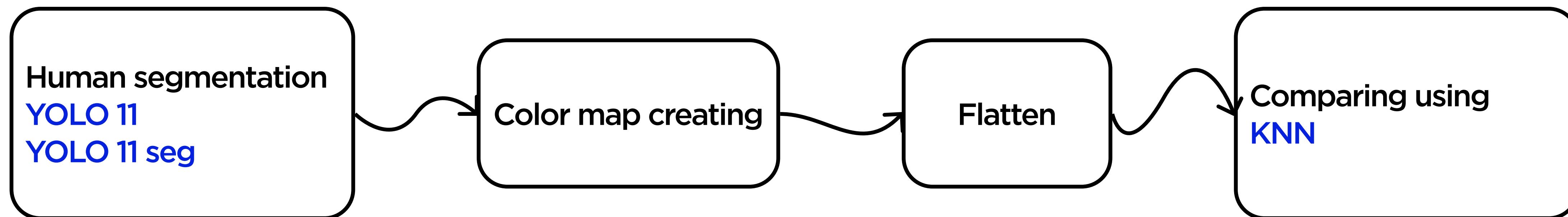
# Our Idea roadmap 1.0

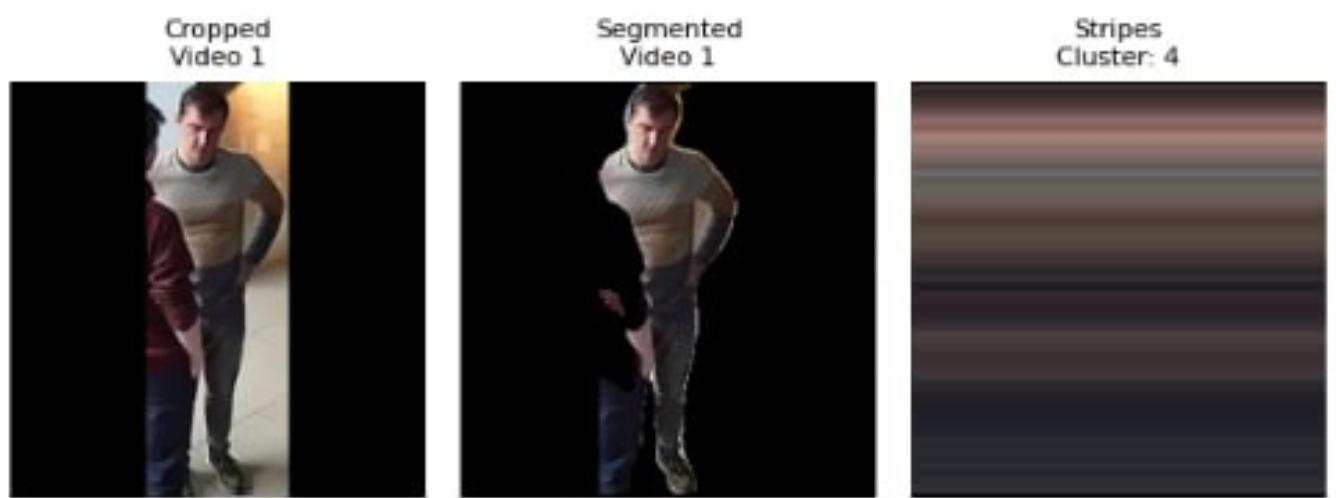
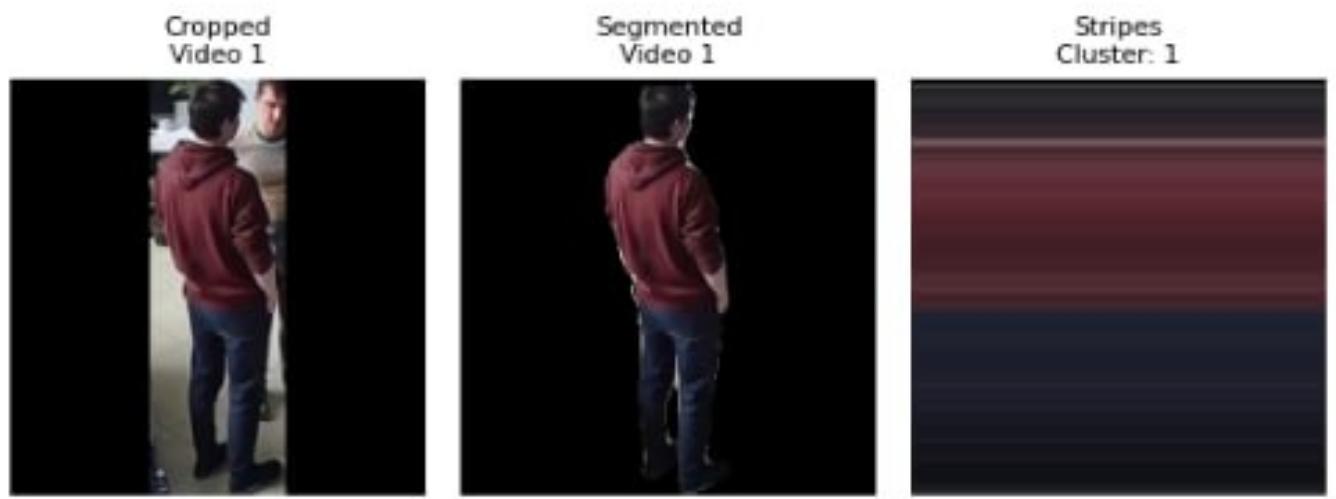
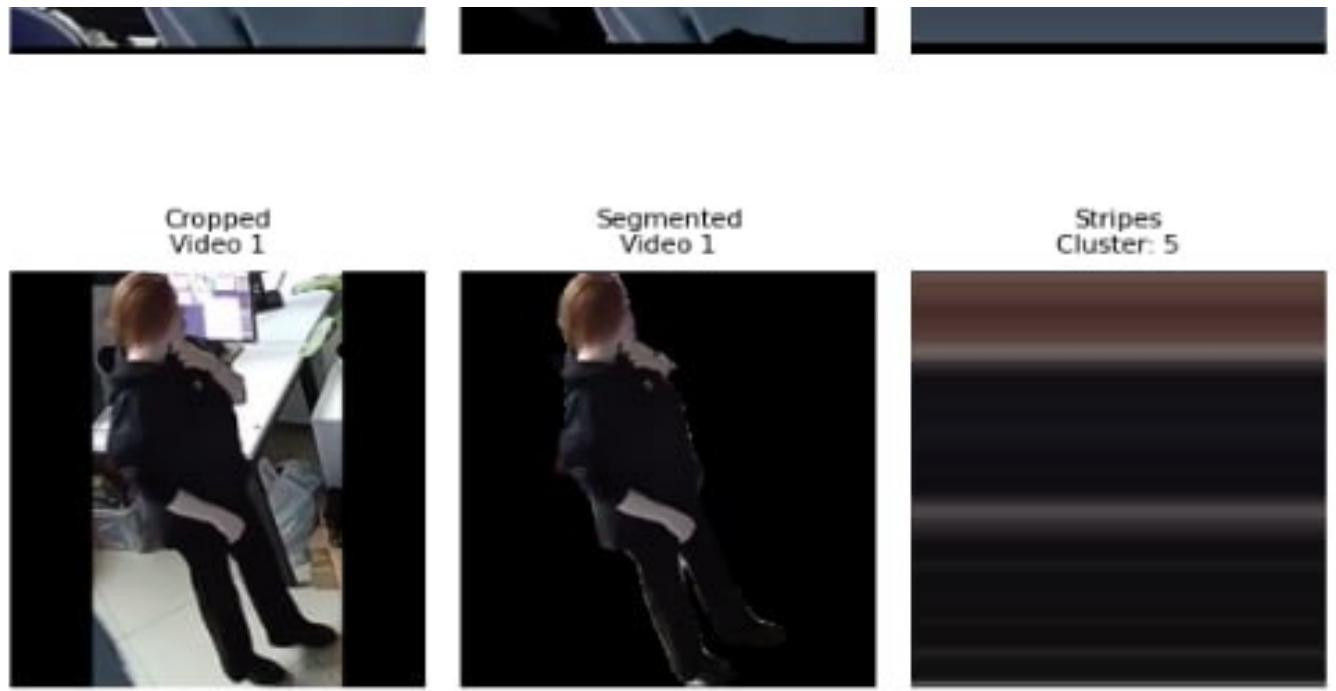
After YOLO detection and segmentation



# Our Idea roadmap 2.0

Implemented approach.  
16 ms/frame - avg. processing time





# Visual

## Basic KNN clustering



Обработка кадра 2

# Scaling

We consider [1.O](#) approach to be more efficient and therefore time-consuming.

## 1. Integration of Vector databases

Using databases to store vector representations such as [Pinecone](#), [Weaviate](#), or [Milvus](#)

## 2. Multilevel Clustering

The transition to more subtle methods, for example, [Hierarchical clustering](#) or [HDBSCAN](#) for local clusters.

## 3. Performance improvement

Using [Redis](#) as a cache pad.  
Parallelization via GPU clusters using [Dask](#) or [Pyspark](#).

## 4. Multi features control

At the prediction stage, you can check several different features. [Clothing](#), [physique](#), [location](#).

# Code Review and Datadump

To change args in docker startup you may configure paths in [docker-compose.yml](#)

