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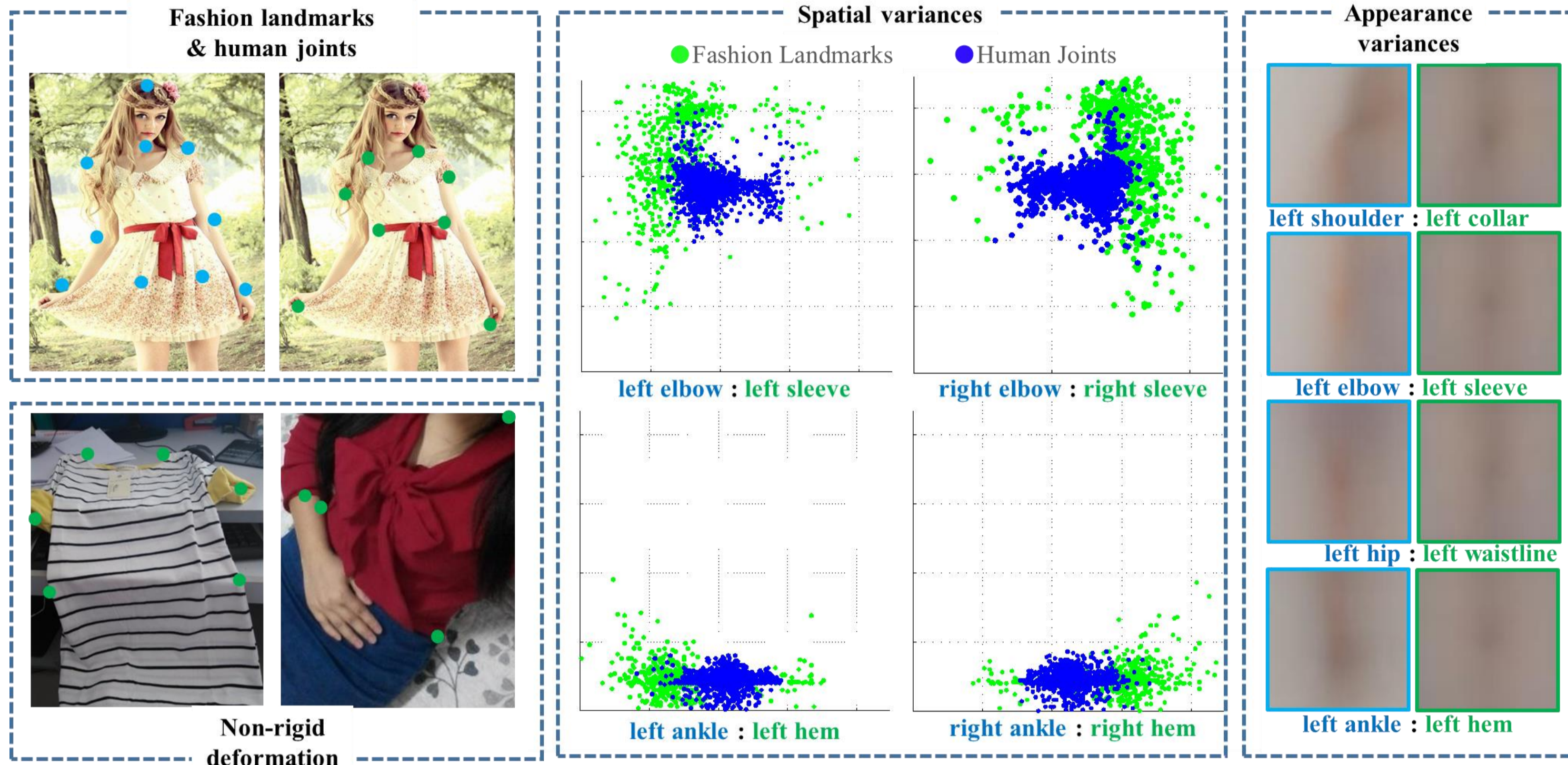
Motivation

Problem:

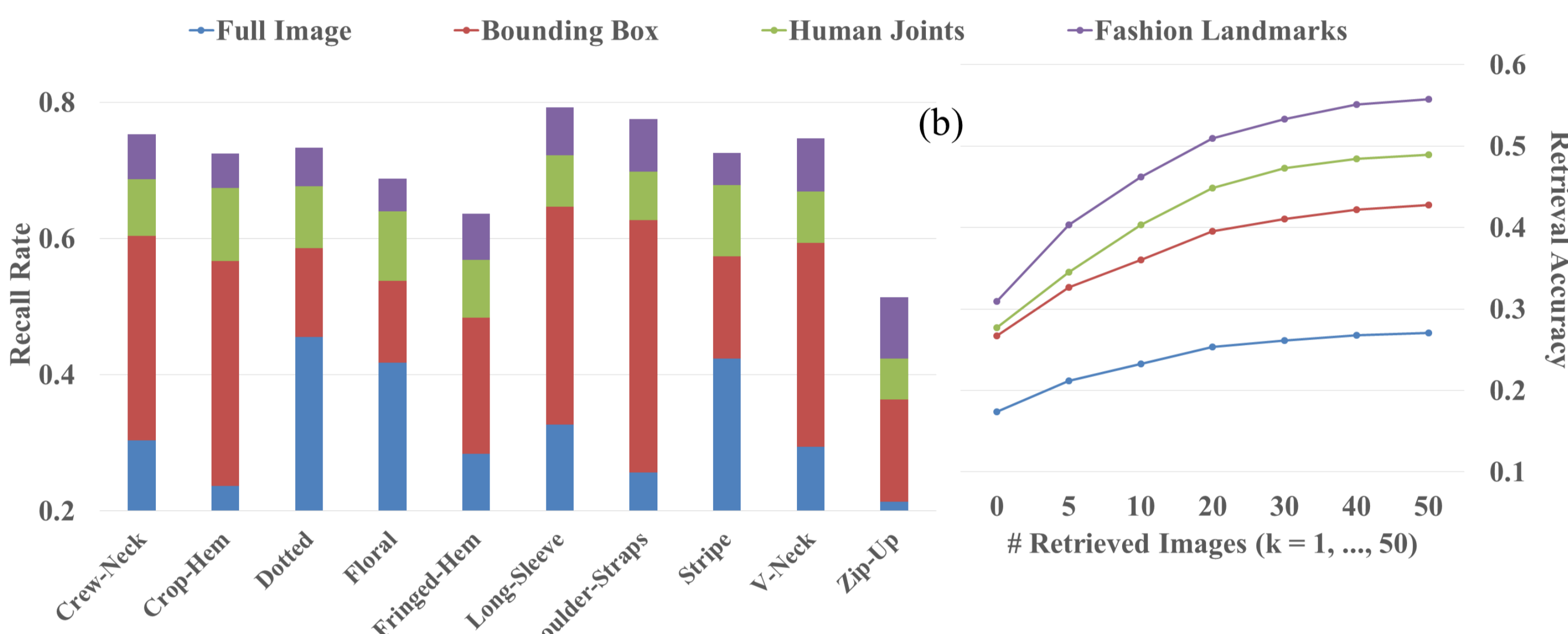
- How to achieve accurate fashion image understanding?

Challenges:

- None-rigid deformations
- Larger spatial variances
- Larger appearance variances



Fashion Landmark is Discriminative Representation



Dataset



Dataset Available



Four benchmarks are developed using the DeepFashion database, including Attribute Prediction, Consumer-to-shop Clothes Retrieval, In-shop Clothes Retrieval, and Landmark Detection.

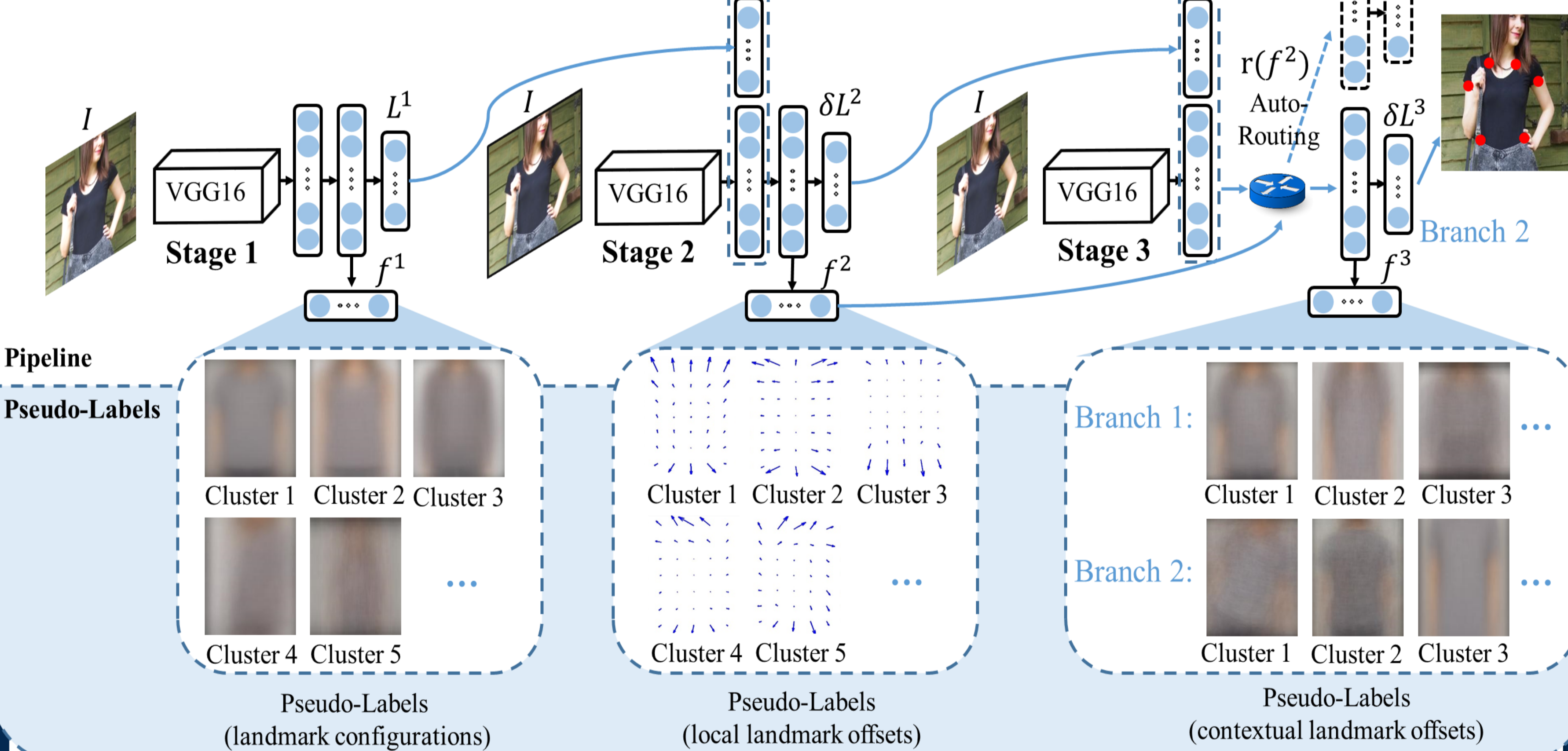


Fashion Landmark Detection Benchmark evaluates the performance of fashion landmark detection. It contains:

- 123,016 number of clothes images;
- 8 fashion landmarks (both location and visibility) for each image;
- Each image is also annotated by bounding box, clothing type and variation type.

Fashion Alignment

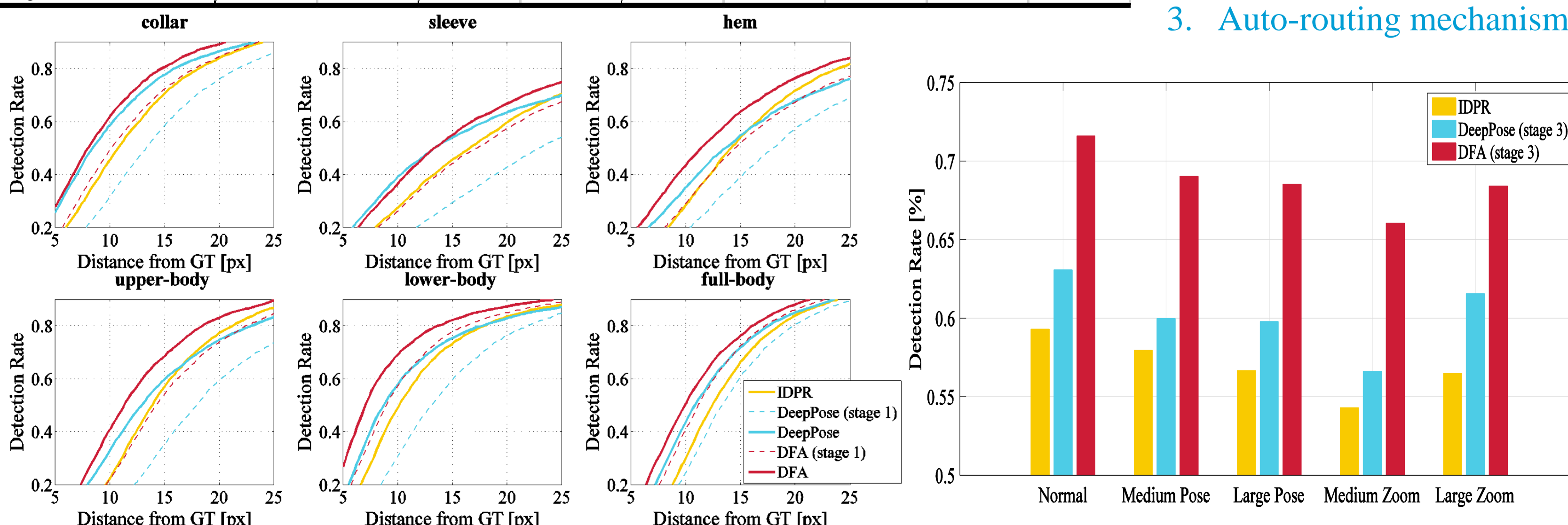
Deep Fashion Alignment (DFA)



Stage	1		2		3		
Component	direct regression	+ p.-labels	direct regression	+ p.-labels (offset)	direct regression	+ two-branch	+ auto-routing
Avg. normalized error	.102	.084	.078	.074	.073	.072	.070
		+ p.-labels (c.offset)			+ p.-labels (offset)		+ p.-labels (c.offset)
							.068

Three properties:

- Deep cascade
- Pseudo-labels
- Auto-routing mechanism



Performance on different fashion landmarks and different clothing types on different evaluation subsets

Visual Results

