Coarse Attribute Prediction with Task Agnostic Distillation for Real World Clothes Changing ReID

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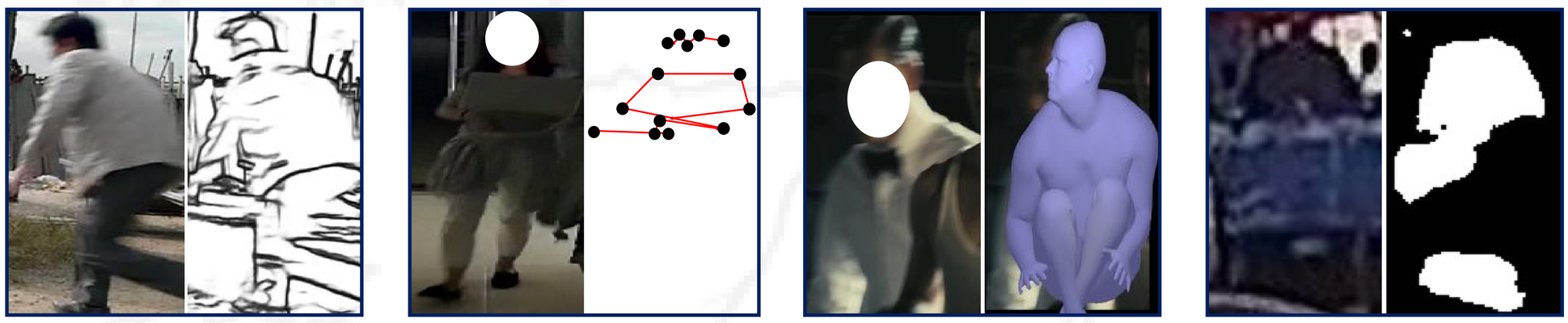
Project

Code

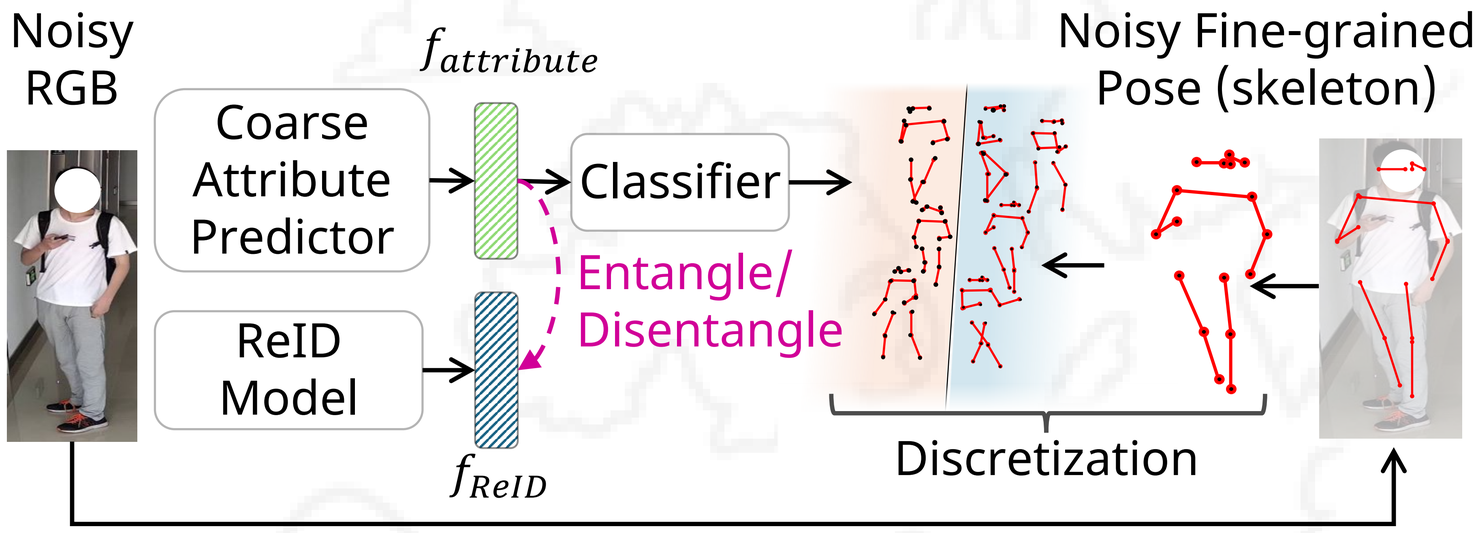
Noisy fine-grained attributes as Input

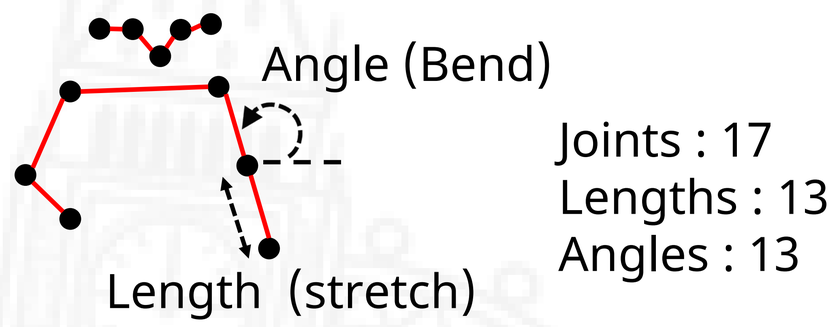
Doesn't work for Low Quality Datasets



Robustness against Low-Quality (RLQ)

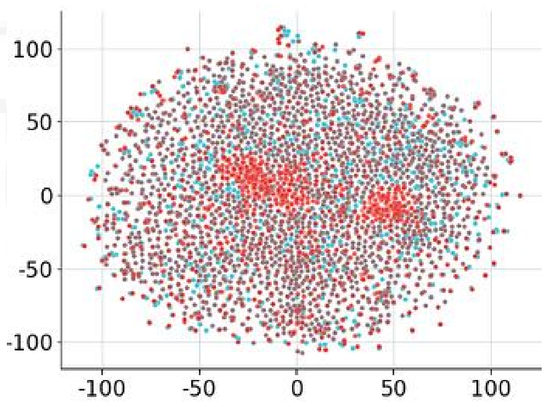
Coarse Attribute Prediction (CAP) External Attributes Features



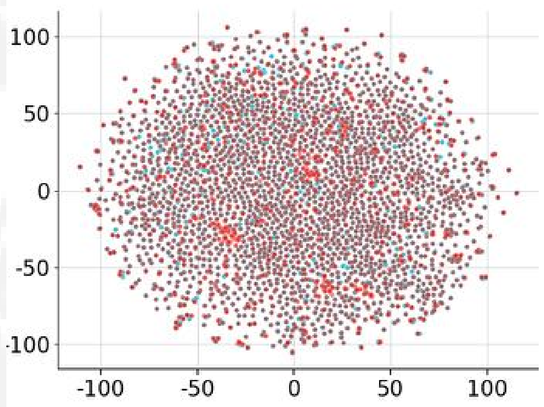


Classification > Generation
Pose **Disentangle**
Gender **Entangle**

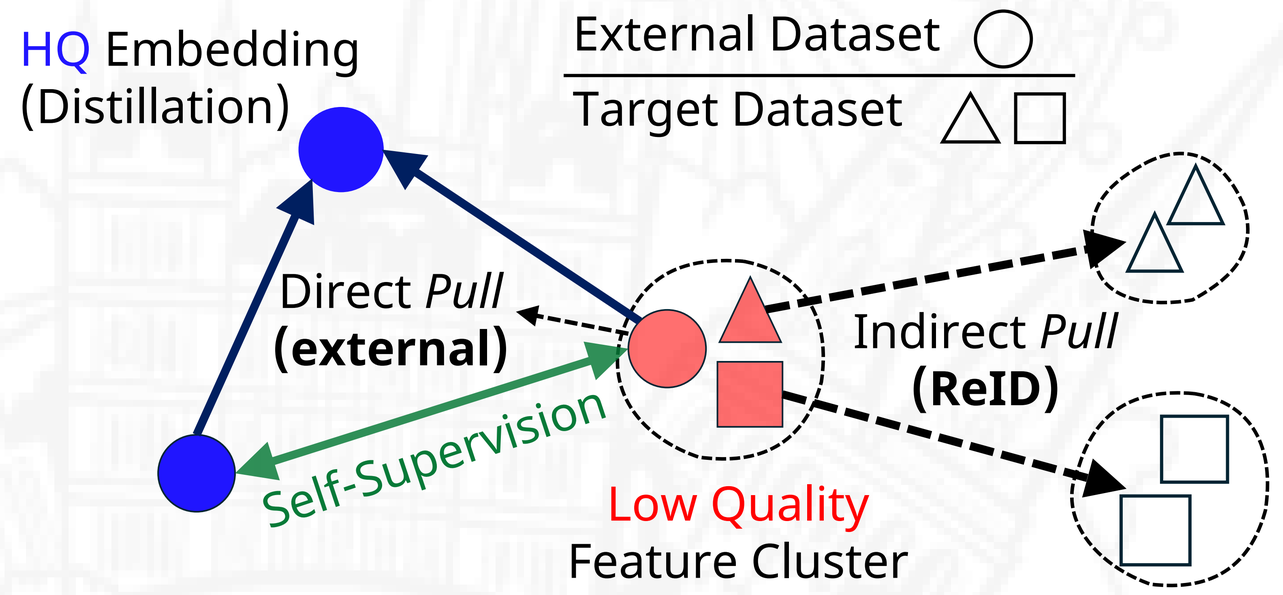
Task Agnostic Distillation (TAD): Model's Internal Features



CAL



CAL + TAD



Results

TAD HQ Dataset	PRCC	
	R1	mAP
Base Model	58.0	59.4
NTU	61.1	59.8
Celeb-ReID	61.2	61.1

Parts	LTCC (R1)	
	Vanilla	+TAD
Base Model	41.1	43.4
+Gender	43.5	44.8
- Pose	42.5	44.7
+ CAP	43.4	46.4

Model	LTCC	PRCC	LaST	DeepChange
Base Model	41.1	58.0	75.5	57.7
RLQ	46.4 **(+5.3)**	64.0 **(+6.0)**	77.9 **(+2.2)**	58.8 **(+1.1)**