
데이터 기반 실시간 의류 시뮬레이션

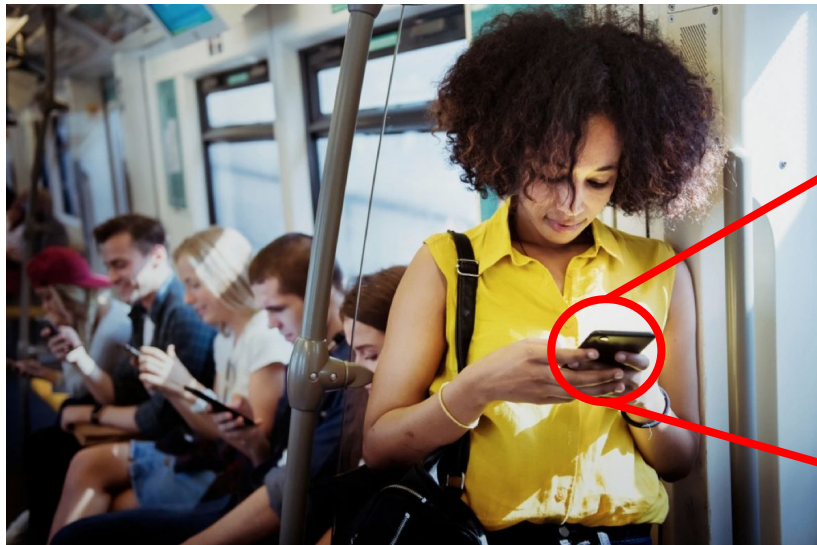
이인권 교수님

이도해 조교님

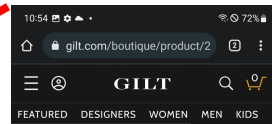
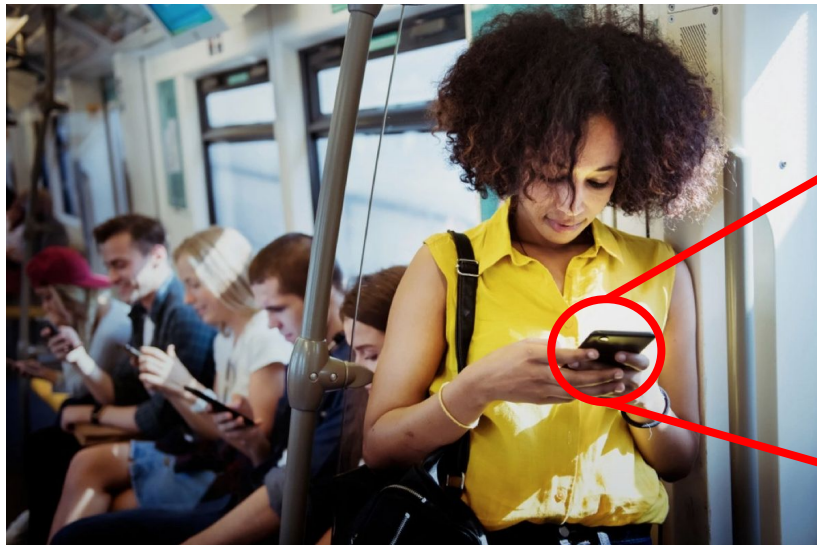
Tailor

전영주 김성하 이규식

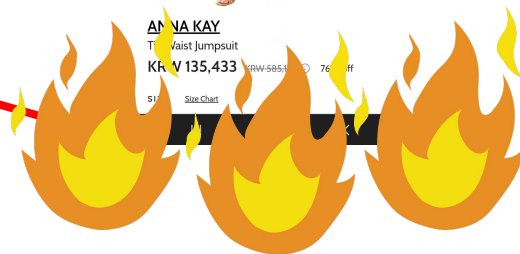
시나리오



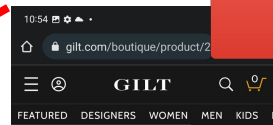
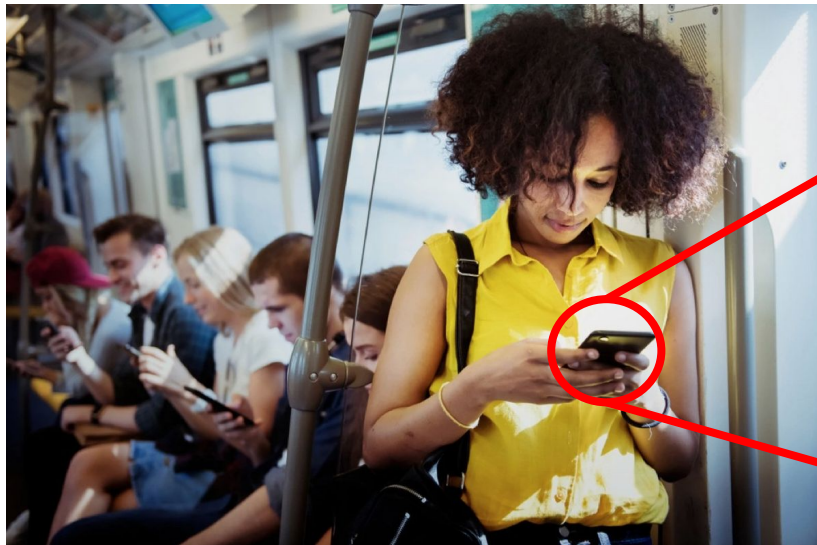
시나리오



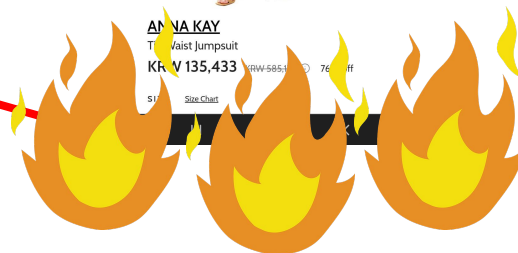
ANNA KAY
T Waist Jumpsuit
KRW 135,433
Size Chart



시나리오



ANNA KAY
T Waist Jumpsuit
KRW 135,433 (76% off)
Size Chart



Problem

개인화, 사실성

Problem

개인화, 사실성

실시간성

Problem

개인화, 사실성

실시간성

적은 리소스

Problem

개인화, 사실성



실시간성



적은 리소스



**Too much
Computation!**



Motivation

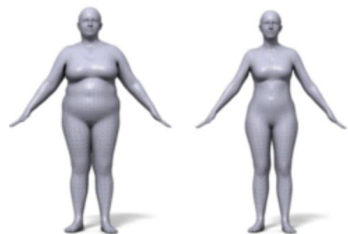
적은 리소스

실시간성

사실성



기존 연구

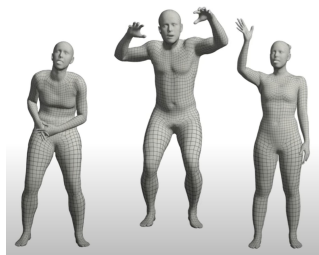


shape

SMPL



Body Vertex



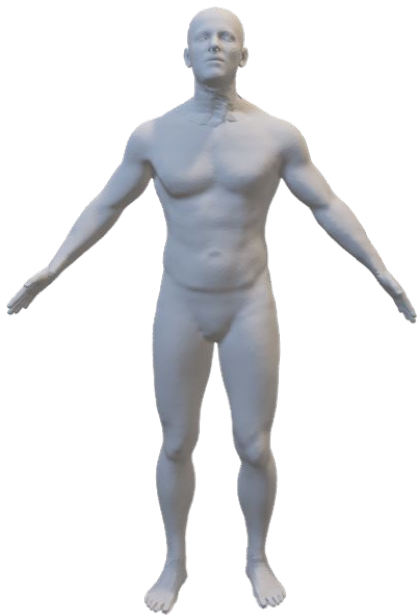
pose

Model



Cloth Vertex

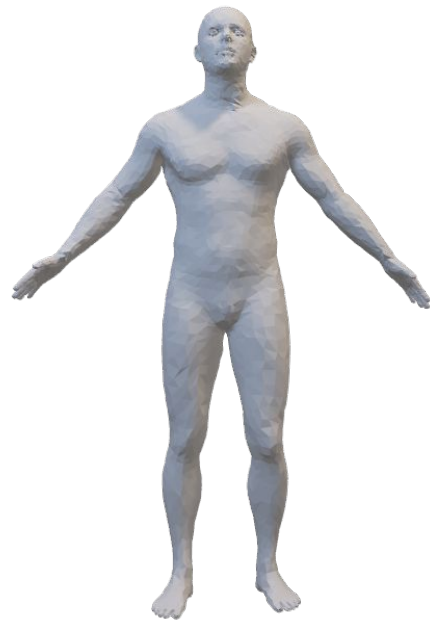
연구 방향 Displacement



target mesh



SMPL

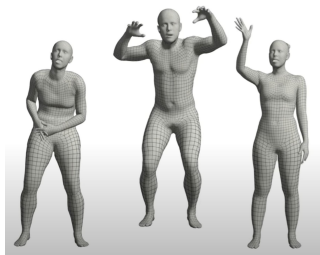


SMPL-D

기존 연구



shape



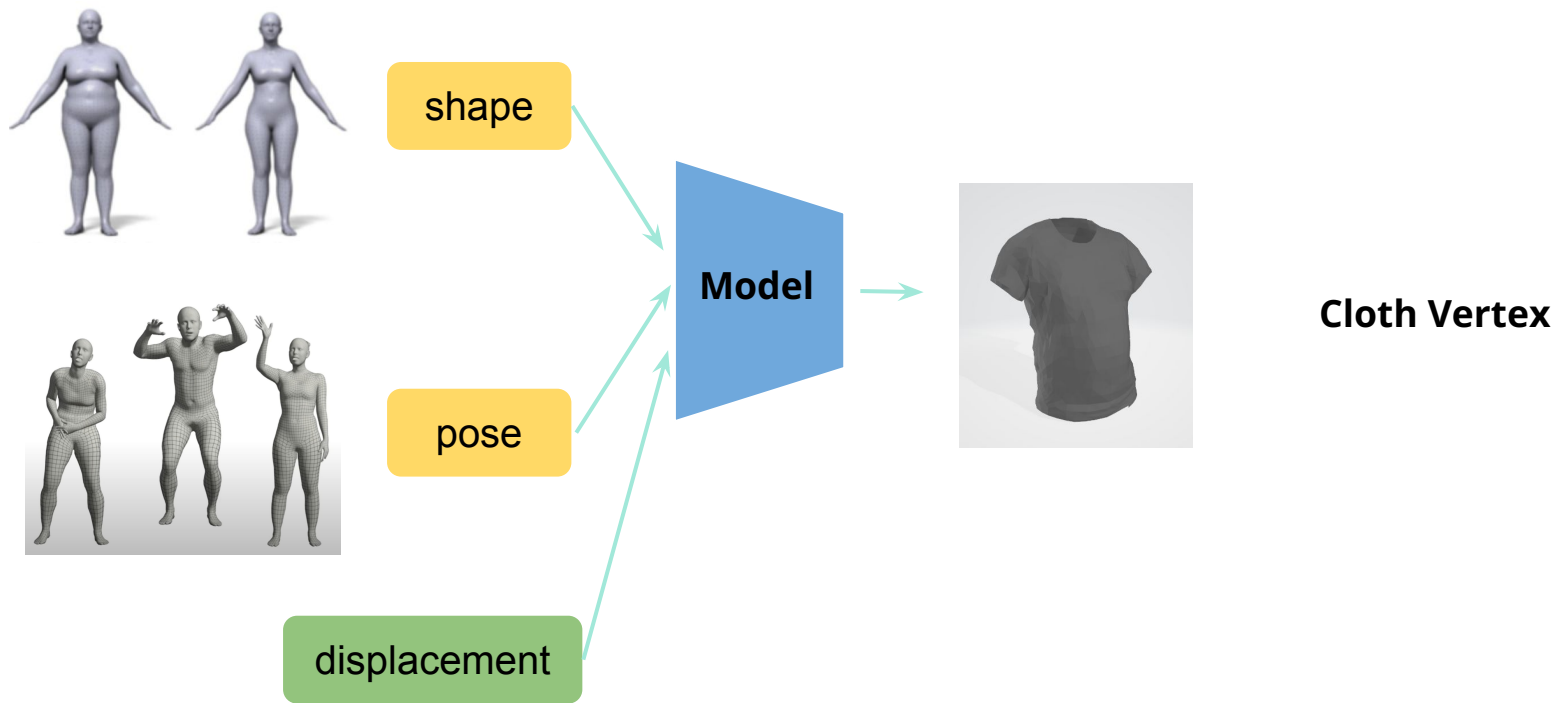
pose

Model



Cloth Vertex

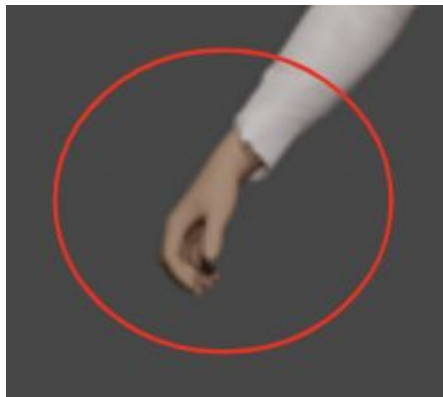
기존 연구



중간 결과



중간결과 한계

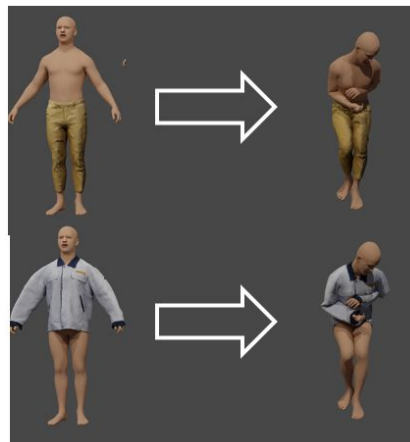


개선된 모델

AI based Inference



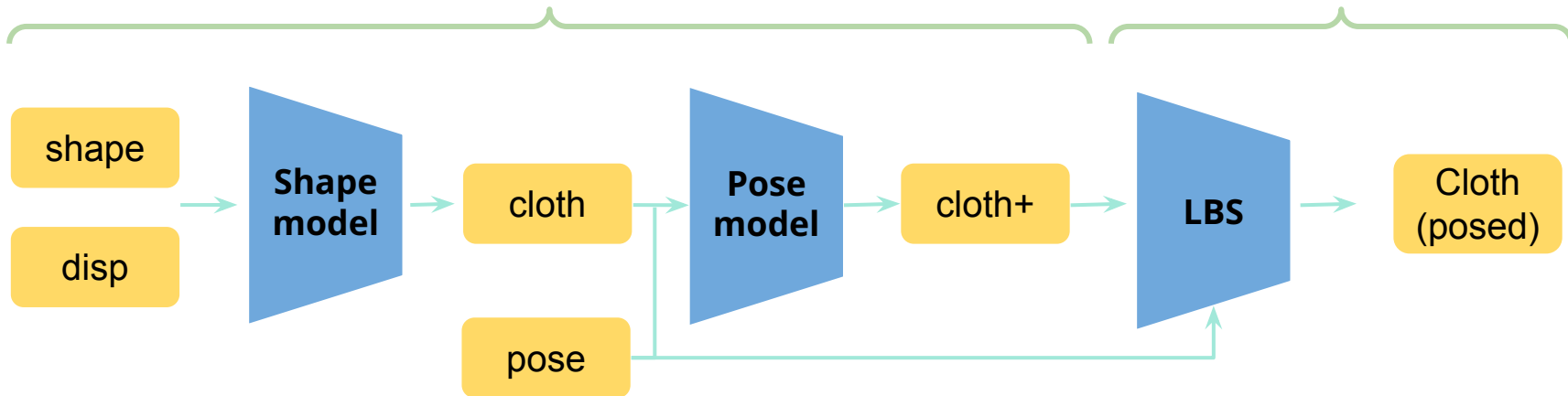
Graphics based
Transformation



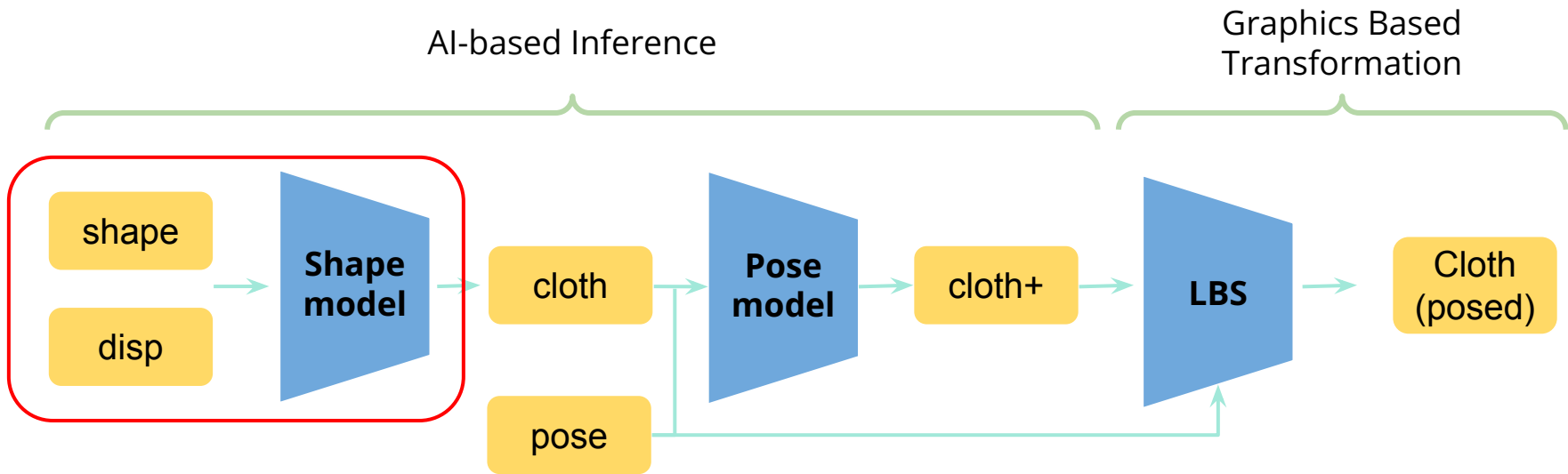
개선된 모델

AI-based Inference

Graphics Based
Transformation



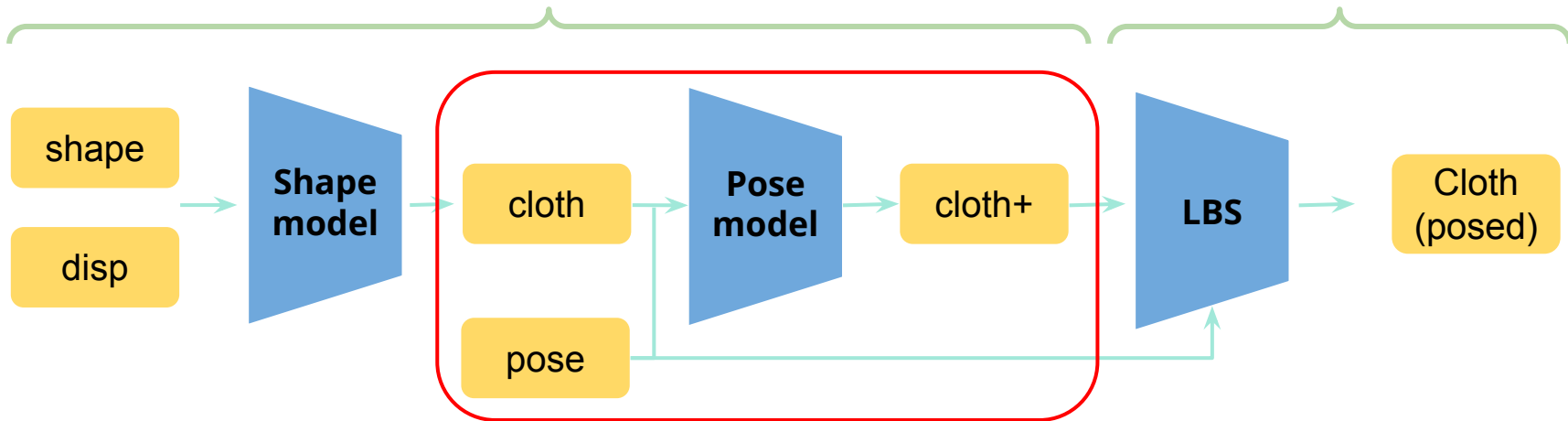
개선된 모델



개선된 모델

AI-based Inference

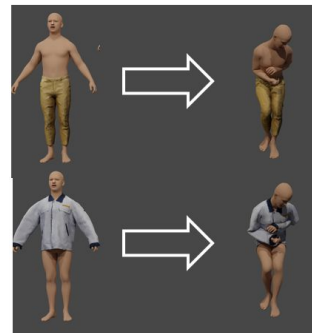
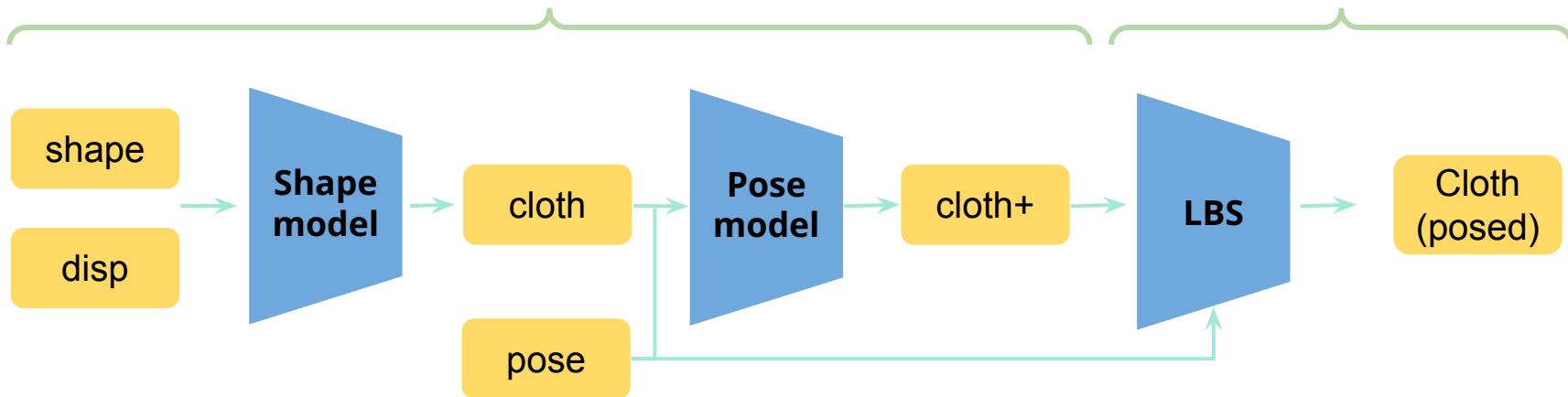
Graphics Based Transformation



개선된 모델

AI-based Inference

Graphics Based Transformation



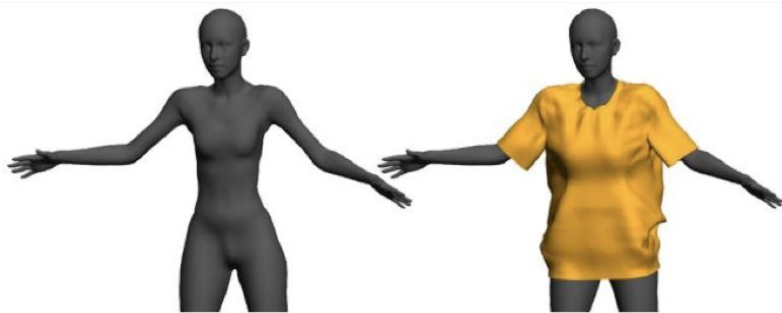
결과



한계점



연구 확장



Context-aware AI model

Demo



Thanks

감사합니다!