



PRIVATE VIRTUAL TRY-ON – AI FASHION ASSISTANT

PRIVACY-FIRST SMART DRESSING POWERED BY QUALCOMM EDGE AI



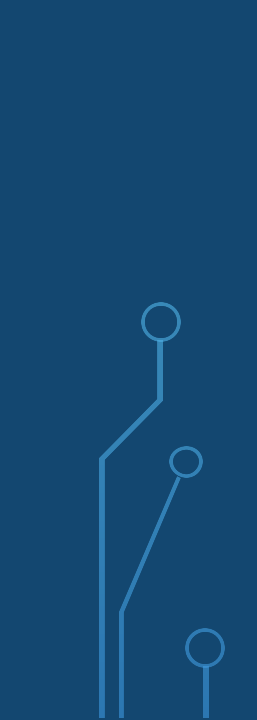
I HAVE NO TOE AND I MUST GO | RAISE YOUR HACK | 08.07.25

PROBLEM STATEMENT

- Online shopping has a huge gap:
 - Users can't try clothes before buying
- Virtual try-on services send personal photos to the cloud
 - Privacy risks, especially under GDPR
 - Cloud latency slows experience



OUR SOLUTION

- **A Virtual Try-On System That Runs 100% On-Device**
 - Upload your image + clothing item
 - See yourself wearing it—in seconds
 - No internet required
 - Nothing ever leaves your device
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HOW IT WORKS



Built on the **HR-VITON** pipeline:



Input 1: User Image



Input 2: Clothing Image



Preprocessing: Pose estimation + clothing alignment



Model Inference: Try-on via deep generative model



Output: Realistic photo of the user wearing the item

HOW IT WORKS

User Image + Clothing Image

Preprocessing

Metadata Extraction (Grok)

Style Recommendation (LLaMA)

Virtual Try-On (HR-VITON)

Final Output

DEMO TIME

User image



Clothing item (T-shirt)



BEFORE & AFTER

Try-on result



TECH STACK

- **Hardware:** Qualcomm Snapdragon Edge AI Dev Kit

Model: HR-VITON

Key Modules:

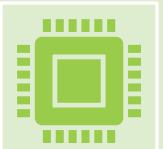
- Detectron2 (pose estimation using MediaPipe)
- Geometric matching network (clothing warping) HR VUITON
- Llama 2 for Outfit Recommendations
- Try-on synthesis (Refinement network)
- ONNX optimization for on-device use



WHY IT'S DIFFERENT

- **100% On-device AI** (no data leaves your phone)
- **GDPR Compliant**
- **Fast & responsive** – no internet delay
- **Customizable to retailers or marketplaces**
- **Private try-on experience for any environment**

USE CASES



**E-commerce
apps with privacy-first
try-on**



**Kiosks in malls or
stores**



**Mobile shopping in
remote areas**



**Boutiques offering
in-store virtual
dressing**

BIGGER VISION



NEXT STEPS:



SUPPORT FULL
OUTFITS (PANTS,
DRESSES)



ADD VIDEO TRY-
ON (USING POSE
SEQUENCES)



USE AR OVERLAY
FOR LIVE
PREVIEW



INTEGRATE WITH
LOCAL SHOPPING
APPS



THANK YOU

TRY BEFORE YOU BUY—WITHOUT SACRIFICING PRIVACY.

QUESTIONS?

[HTTPS://GITHUB.COM/KIMO18/AI_FASHION_STYLER](https://github.com/KIMO18/AI_FASHION_STYLER)