

Person gender



"A traffic officer leaning on a no turn sign"

Person race



"A man riding an elephant into some water of a creek"

Person age



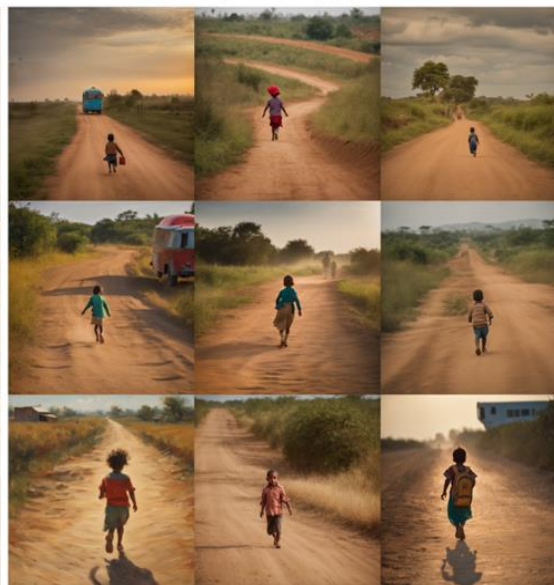
"A woman riding a horse in front of a car next to a fence"

Child gender



"Toddler in a baseball cap on a wooden bench"

Child race



"Small child hurrying toward a bus on a dirt road"

Person attire



"The lady is sitting on the bench holding her handbag"

Child race



"A small child hurrying toward a bus on a dirt road"

Child race



"A small child hurrying toward a bus on a ~~dirt~~ road"

Future Directions

Text-to-Image models exhibit various biases outside the well-known ones

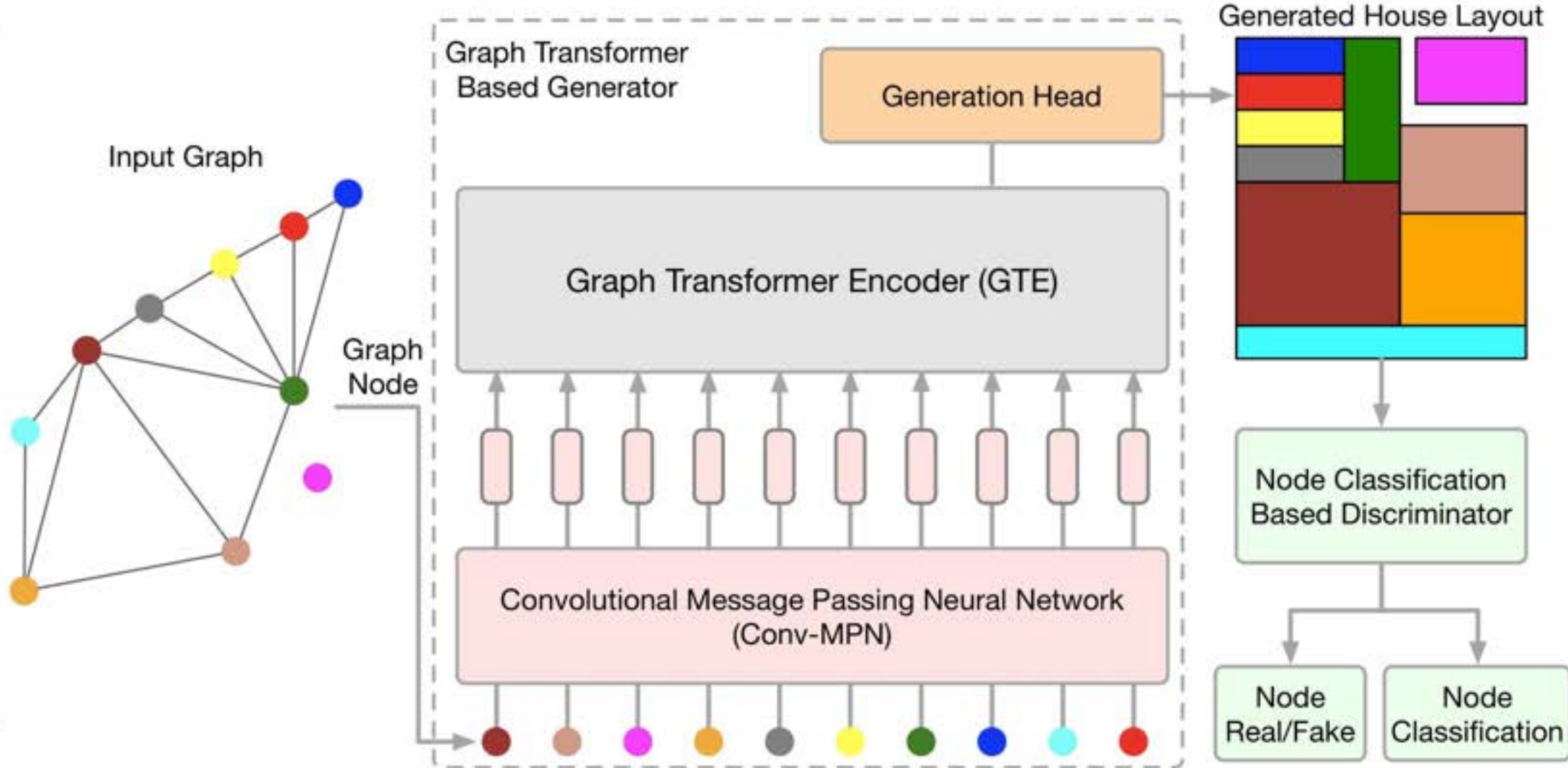
Current challenges:

- Improve bias **detection** methods
 - This research direction is new and requires further study
- Extend bias **mitigation** techniques to novel biases
 - Are the current methods robust against these biases?
- Analyze the individual bias contribution of the words in a prompt
- Early detection of bias formation during the generation process

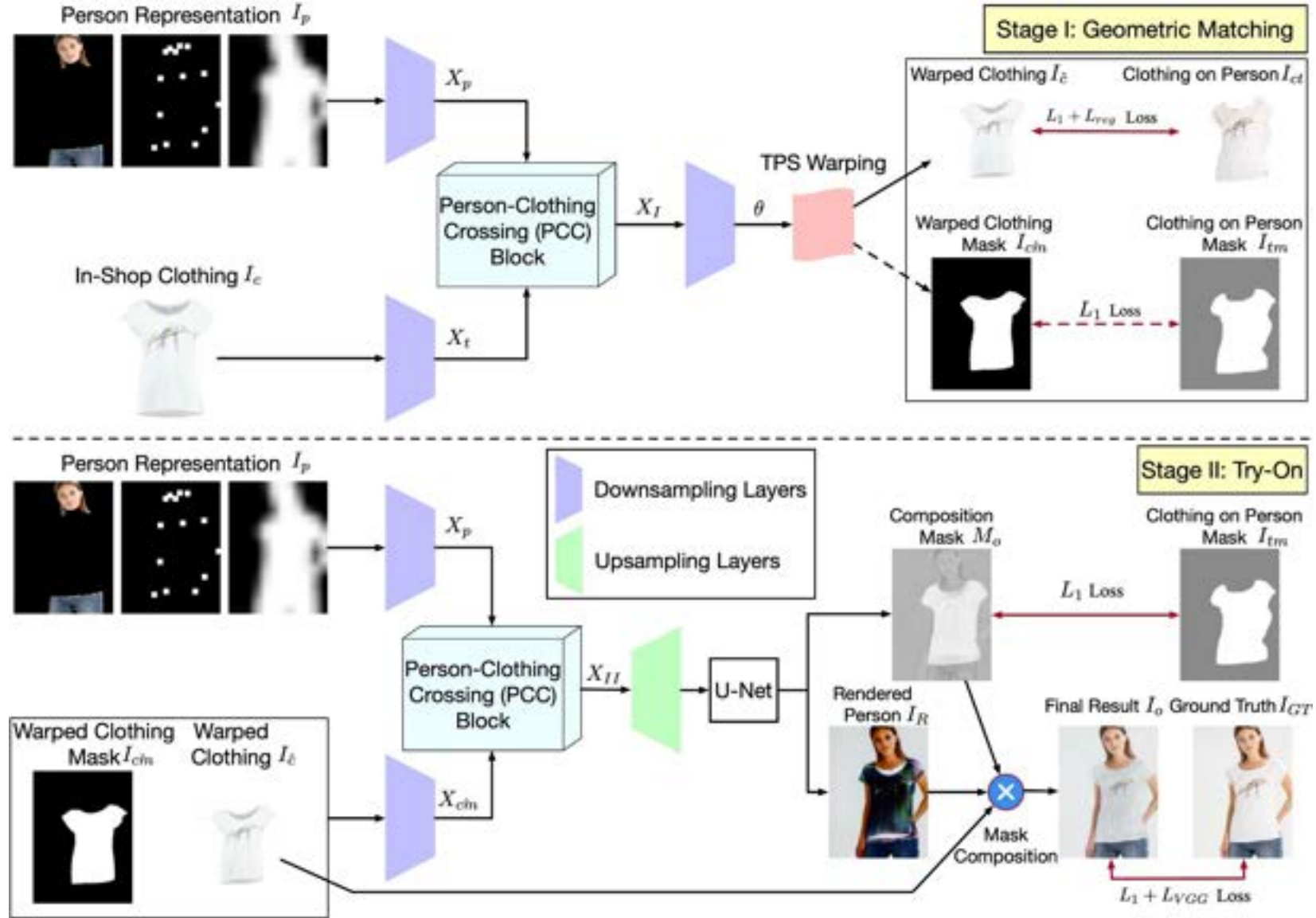
Other Research Subjects

House Layout Generation

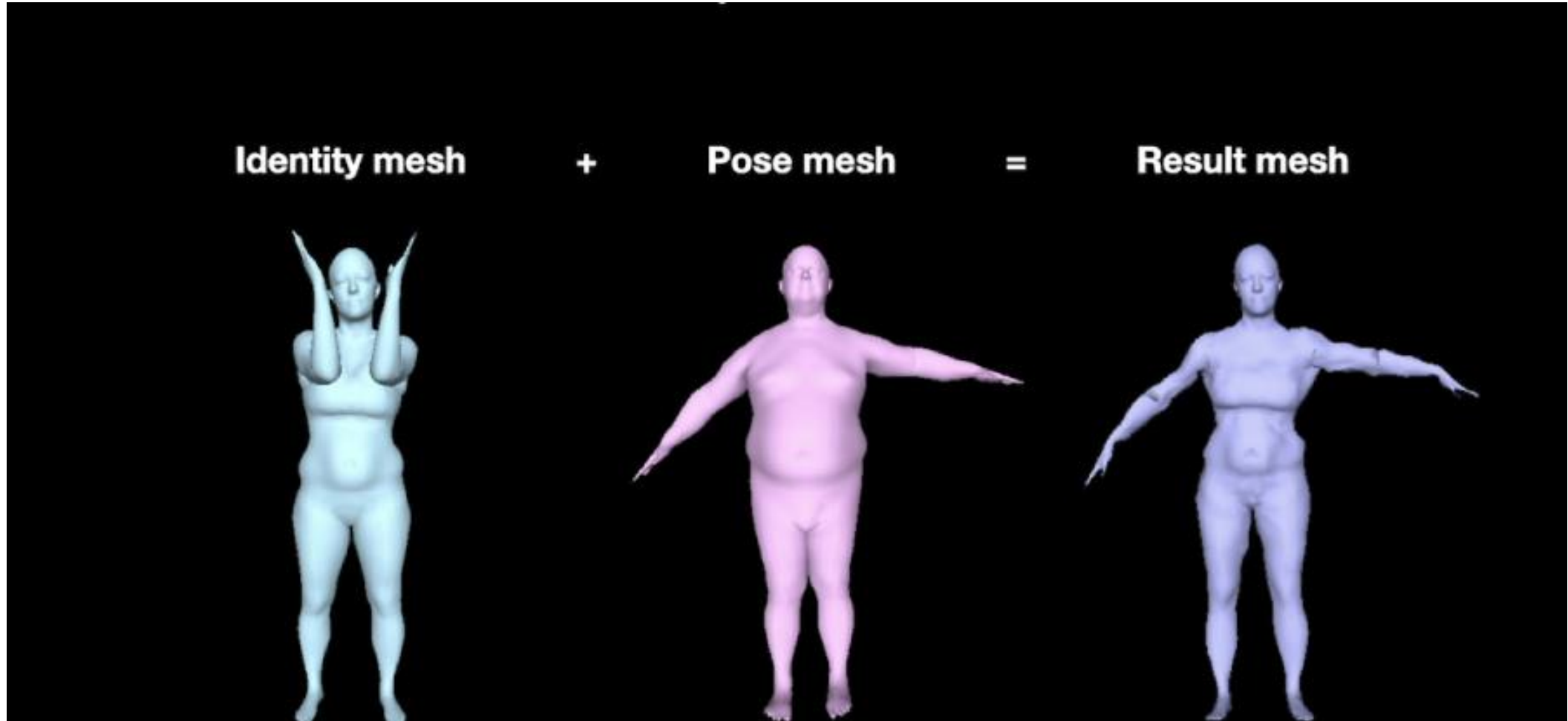
- Living Room
- Laundry Room
- Dining Room
- Corridor
- Kitchen
- Closet
- Bedroom
- Balcony
- Bathroom
- Unkown



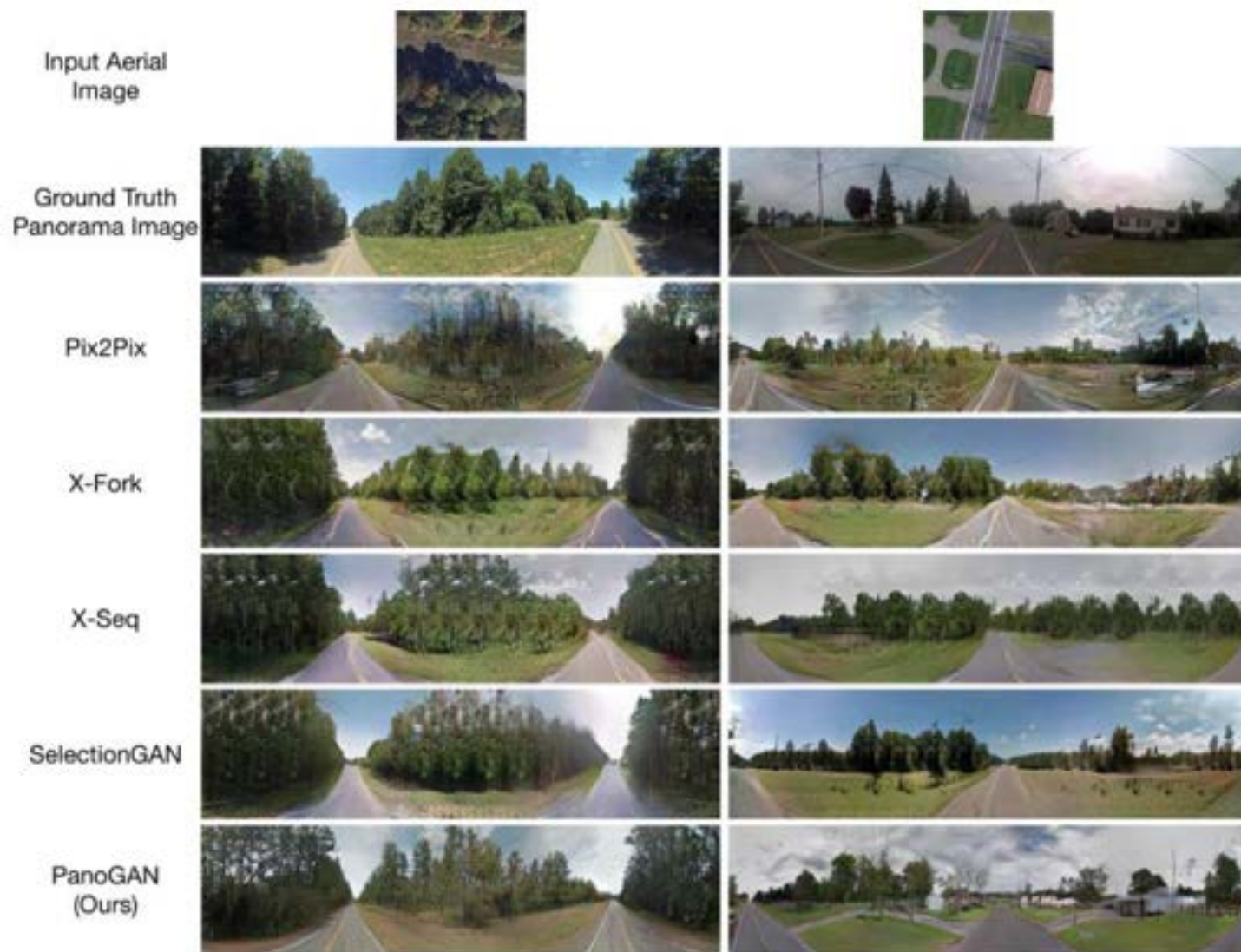
Virtual Try-On



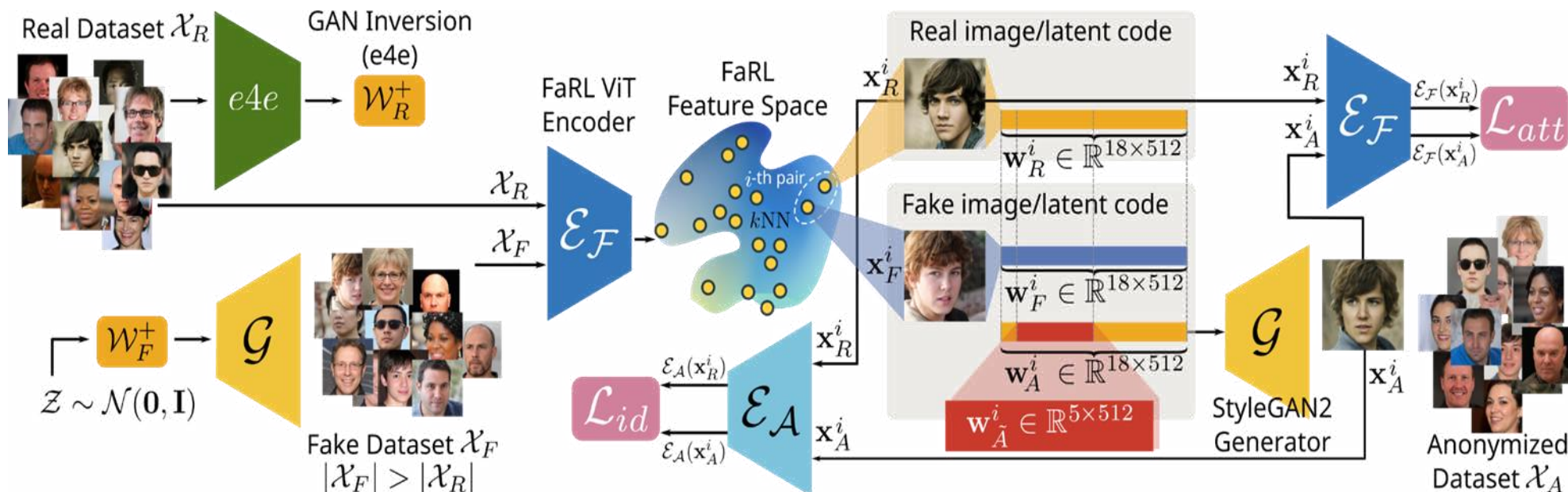
3D Pose Transfer



Cross-View Panorama Image Synthesis



Attribute-preserving Face Anonymization



- Anonymize face datasets, i.e, privacy of those depicted is not violated, while at the same time the dataset is useful for downstream tasks.
- Optimize the images' latent representation in the space of a pre-trained StyleGAN2 by ensuring both that the identity is of a desired distance away from the original (ID loss), whilst preserving the facial attributes (Attr. loss) in FaRL's/CLIP's space.
- Ongoing: Incorporate Diffusion Models towards anonymization of datasets

	Original	CIAGAN	DeepPrivacy	Ours
ID anonymized		✓	✓	✓
Attr. preserved		✗	✗	✓

humans | SCALE



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