

# Semester Project / BSc MSc Thesis

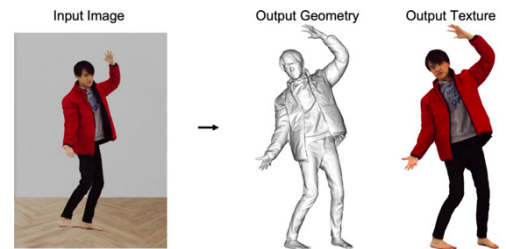
Supervisor: Hsuan-I (Sean) Ho

How to apply:

SiROP or E-mail: [hohs@ethz.ch](mailto:hohs@ethz.ch)

Please make sure you attach your CV, transcript of records, and a short introduction to the application.

Only students of ETH/UZH or mobility/exchange students at ETH will be considered!



## Available topics:

**Editable 3D Avatar** <https://custom-humans.github.io/>

- Automatic and fine-grained avatar generation pipeline.
- Scale-up generative models.



**Single-view Clothed Human Reconstruction** <https://sith-diffusion.github.io/>

- Reconstruct fully textured 3D meshes from one image.
- Reconstruct layered garment meshes from multiple images.

**Generative Diffusion Model using 2D Semantic Guidance**

<https://eth-ait.github.io/4d-dress/>

- Generate multi-view consistent humans/clothing from partial observations
- Design ControlNet models using 2D semantic labels of clothing.
- Data augmentation using diffusion models.

For more project information please reach me out by emails. You are also welcomed to propose your own project.

## Preferred Skillsets:

- Understanding of 3D Computer Vision (Have taken Machine Perception, Computer Vision or other related courses).
- Experience with deep learning model and development in PyTorch.
- Good GPA and academic performance.
- Self-motivation and ability to work independently.