

- Generate models:
 - GAN:
 - Learning about GAN: [\(7\) Xây dựng Mạng lưới thần kinh đối nghịch sáng tạo với Tensorflow và Python | Dự án học sâu - YouTube](#)
 - Diffusion models
 - models tend to use a generator only for synthesizing the image and use the perceptual from a pre-trained VGG network to ensure realism.
- 2 Ways to warp:
 - thin-plate-spline:
 - implement: [Animate ANY Face From A SINGLE IMAGE \(Thin Plate Spline Motion Model\) \(youtube.com\)](#)
 - Source code: [yoyo-nb/Thin-Plate-Spline-Motion-Model: \[CVPR 2022\] Thin-Plate Spline Motion Model for Image Animation. \(github.com\)](#)
 - Paper: [arxiv.org/pdf/2203.14367v2](#)
 - Cons: distortion
 - appearance flow: ...
- Modules:
 - Knowledge distillation:
 - Paper: [Knowledge Distillation: A Good Teacher Is Patient and Consistent \(thecvf.com\)](#)
 - Brief: [\(7\) Knowledge Distillation: A Good Teacher is Patient and Consistent - YouTube](#)
 - Tieng Viet (code): [Khoa học dữ liệu \(phamdinhhkhanh.github.io\)](#)
 - Segmentation modules
 - Cons: it can some times generate inaccurate or incomplete segments, which can lead to disastrous outcomes