Conditional image synthesis with diffusion model

Domain Translation
- ILVR
- SDEdit
- DDIB

Text to image
- Diffusion in Latent Space
  - LDM
  - Stable Diffusion
- Diffusion in Image Space
  - Imagen (T5 Encoder)
  - Glide (Transformer Encoder)
  - DALL-E2 (CLIP Encoder)

Image guidance to image
- LDM
- ControlNet
- T2I-Adapter
- PITI

Image Editing with text
- Text edit with CLIP
  - Asyrp
  - DiffusionCLIP
  - Blend Diffusion
  - DALL-E2
- Exploit big T2I models
  - Model fine tuning
    - Imagic
    - Forgedit
  - DDIM Inversion
    - Diffedit
    - Prompt-to-Prompt
    - CFG Inversion Technics
      - Direct Inversion
      - Style Diffusion
      - Null Text Inversion
      - Negative Inversion
      - EDICT

Customization
- Model fine tuning
  - DreamBooth
- Text embedding optimization
  - Textual Inversion

Image Restoration
- Supervise
  - SR3
  - SR3+
  - Cascade Diffusion Model
  - Resdiff
  - IR-SDE
  - Palette
  - SRDiff
- Zero-shot
  - Solve Inverse Problems
    - DDRM
    - DPS
    - BlindDPS
  - 自由主题
  - blend with unmask information
    - Repaint
    - Blend Diffusion

Auxiliary technics for condition injecting
- Guidance Technics
  - Classifier-free Guidance
  - CLIP-Guidance
  - Classifier Guidance
- Image Captioning/Tokenizing
  - BLIP
  - Textual Inversion
  - E4T
  - P+