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

- **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+

Presented with xmind