

Other Improvement Techniques

Part 6/7: Advanced Techniques



Cascaded Diffusion

Low-res generation → super-resolution



Upsampler

Specialized diffusion model for upscaling



Progressive Distillation

Student mimics T-step teacher in T/2 steps



Consistency Models

One-step generation via consistency training



Flow Matching

Alternative to diffusion with optimal transport



Rectified Flow

Straightens probability paths for efficiency



Adversarial Diffusion

Add adversarial loss for sharper samples



Truncation Tricks

Early stopping or partial diffusion for control

📁 Categorization by Purpose



Quality



Speed



Alternative



Control

3 techniques

2 techniques

2 techniques

1 technique