

Applications and Conclusion

Part 7/7: Applications and Extensions



Text-to-Image

Popular

DALL-E 2, Stable Diffusion, Midjourney, Imagen



Video Generation

Temporal diffusion models



Audio Synthesis

Diffusion for music and speech generation



Medical Imaging

Denoising, reconstruction, synthesis



Image Editing

Inpainting, outpainting, style transfer



3D Generation

NeRF + diffusion (DreamFusion)



Molecular Design

Drug discovery and protein design



Future Directions



Real-time
Generation



Better
Control



Improved
Efficiency