Leveraging StyleGAN for Image Editing and Manipulation

Abstract:

StyleGAN has recently been established as the state-of-the-art unconditional generator, synthesizing images of phenomenal realism and fidelity, particularly for human faces. With its rich semantic space, many works have attempted to understand and control StyleGAN’s latent representations with the goal of performing image manipulations. To perform manipulations on real images, however, one must learn to invert the GAN and encode the image into StyleGAN’s latent space, which remains a challenge. In this talk, I will discuss recent techniques and advancements in GAN Inversion and explore their importance for real image editing applications. In addition, going beyond the inversion task, I will demonstrate how StyleGAN can be used for performing a wide range of image editing tasks.