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MyStyle - A Personalized Generative Prior

Abstract:

Deep generative models have proved to be successful for many image-to-image applications. Such models hallucinate information based on their large and diverse training datasets. Therefore, when enhancing or editing a portrait image, the model produces a generic and plausible output, but often it isn't the person who actually appears in the image.

In this talk, I'll present our latest work, MyStyle - which introduces the notion of a personalized generative model. Trained on ~100 images of the same individual, MyStyle learns a personalized prior, custom to their unique appearance. This prior is then leveraged to solve ill-posed image enhancement and editing tasks - such as super-resolution, inpainting and changing the head pose.