

Hairstyle Change with GAN

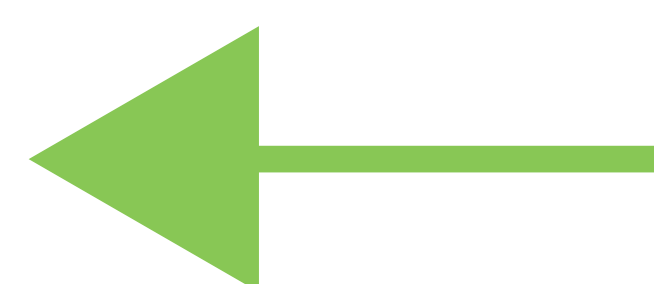
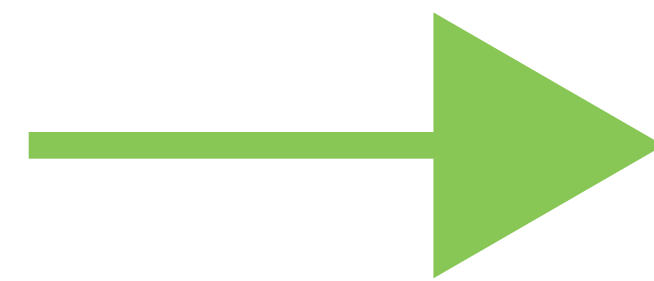
Team 24

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Challenge

- We tried to enable better & immediate hair-fit trial using generative models, and propose a GAN model which supports haircolor-change.

Motivation

- With just seeing a catalog, It is very difficult to imagine which hairstyle fits for each. Furthermore, We have little opportunity to try (once/1 ~ 2 month).
- We wish we could test many hairstyles online. However, we can wear only virtual wigs in App Store. Little AI work proposed so far.

What We Did

- Data collection for many hairstyle of the japanese
- Labeling with the support of Google CloudVision
- Build / Train generative models.

What We Achieved

- We trained CycleGAN for domain-to-domain conversion and achieved haircolor/style conversion.
- However, it is still difficult to change hair shape while keeping face the same. We are tackling this issue by customized reconstruction loss, other models such as VAE-GAN etc, but any of them do not contribute to better result.