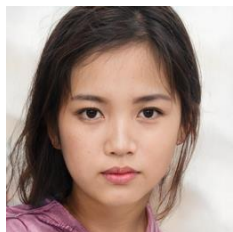
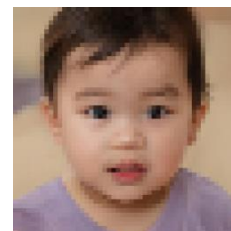




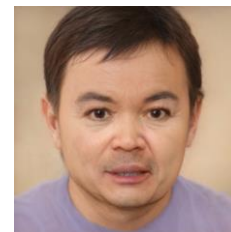
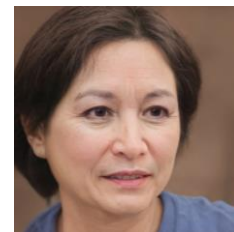
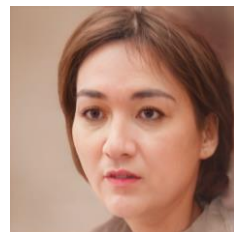
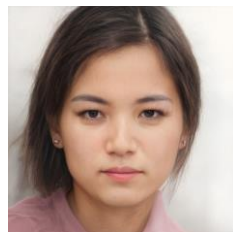
Original



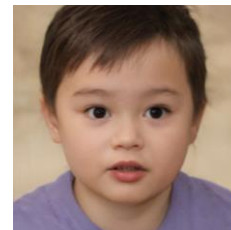
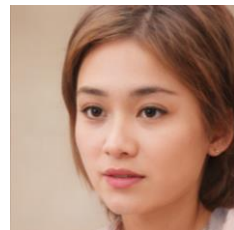
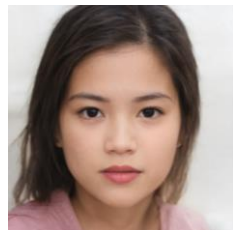
Blurred



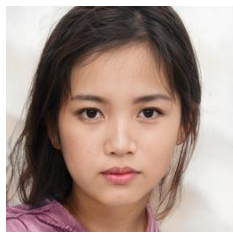
Aged



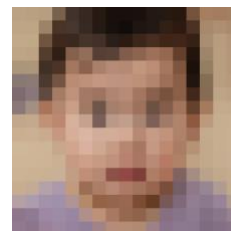
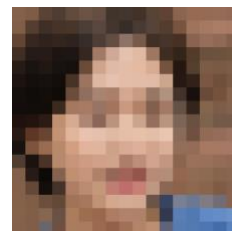
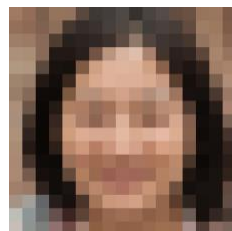
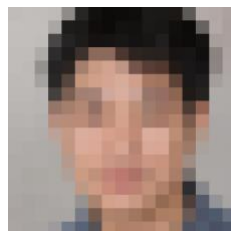
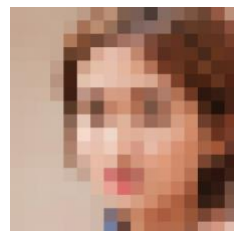
Recoverd



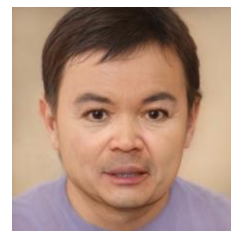
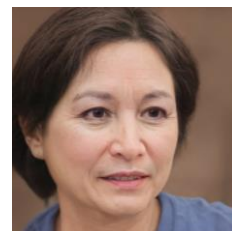
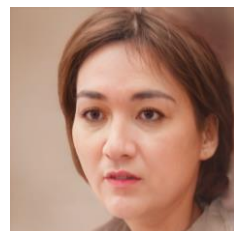
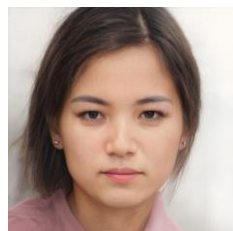
Original



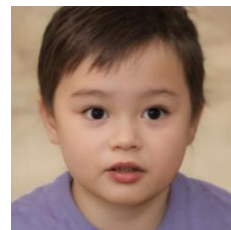
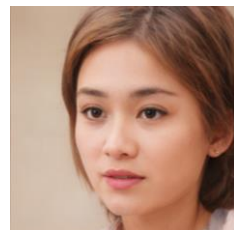
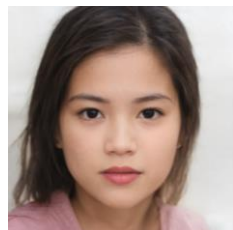
Blurred

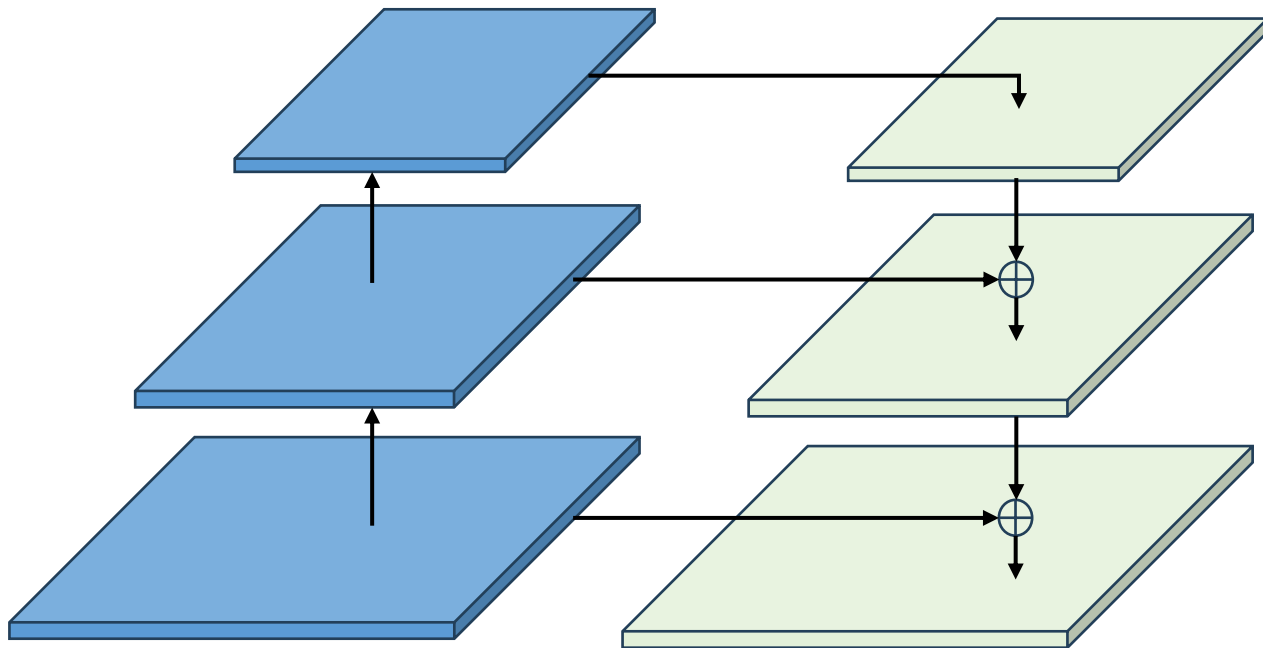


Aged



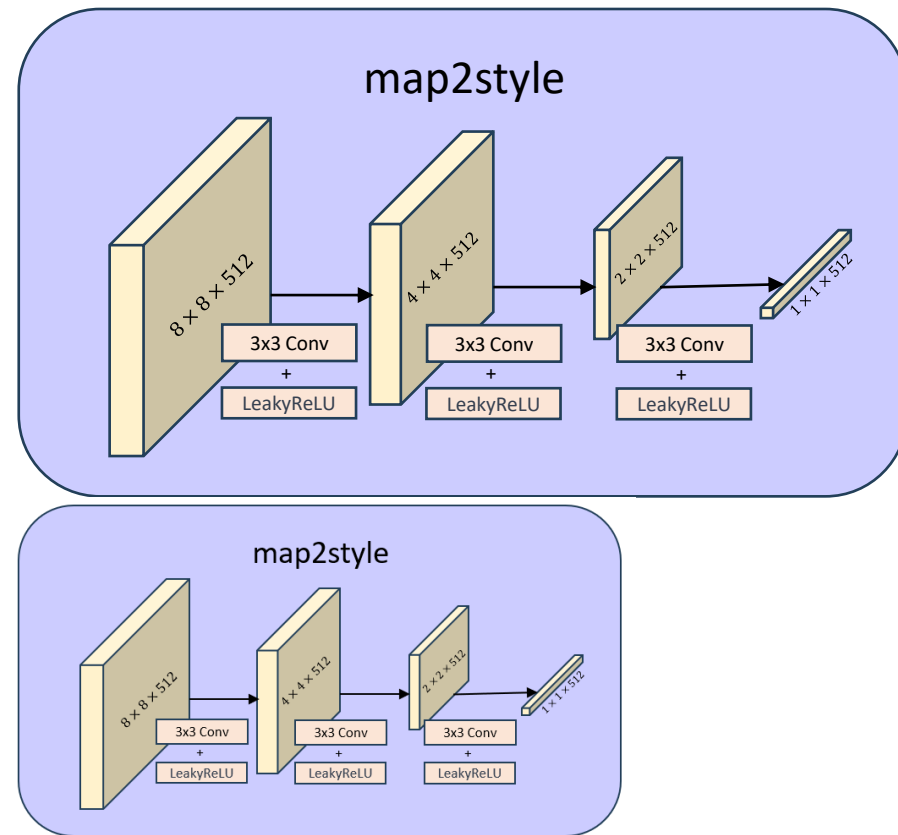
Recoverd



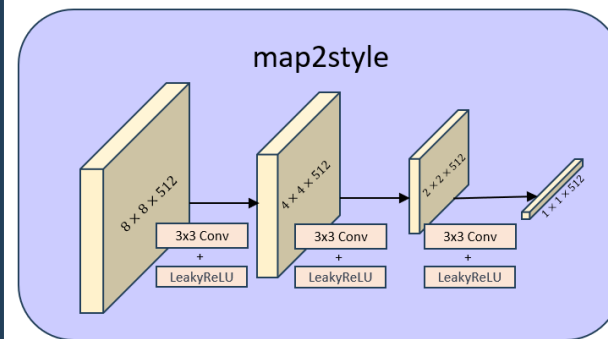
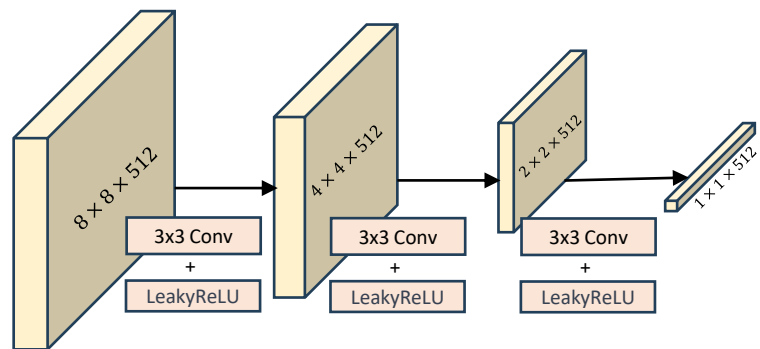


a) ResNet

b) Feature pyramid



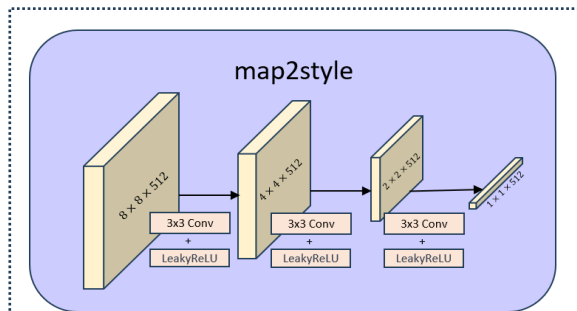
map2style





Input Image

*pSp Encoder*



map2style

map2style

0-2

map2style

⋮

map2style

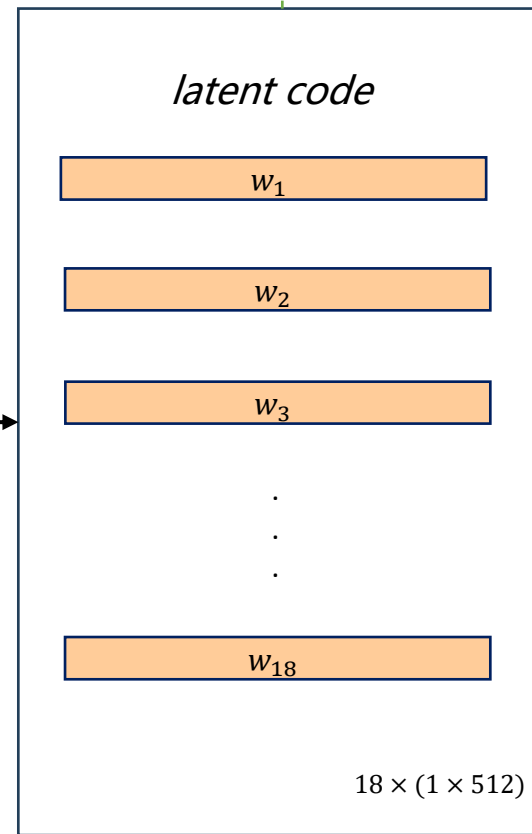
3-6

map2style

⋮

map2style

7-18



*latent code*

$w_1$

$w_2$

$w_3$

⋮

$w_{18}$

$18 \times (1 \times 512)$

average

+

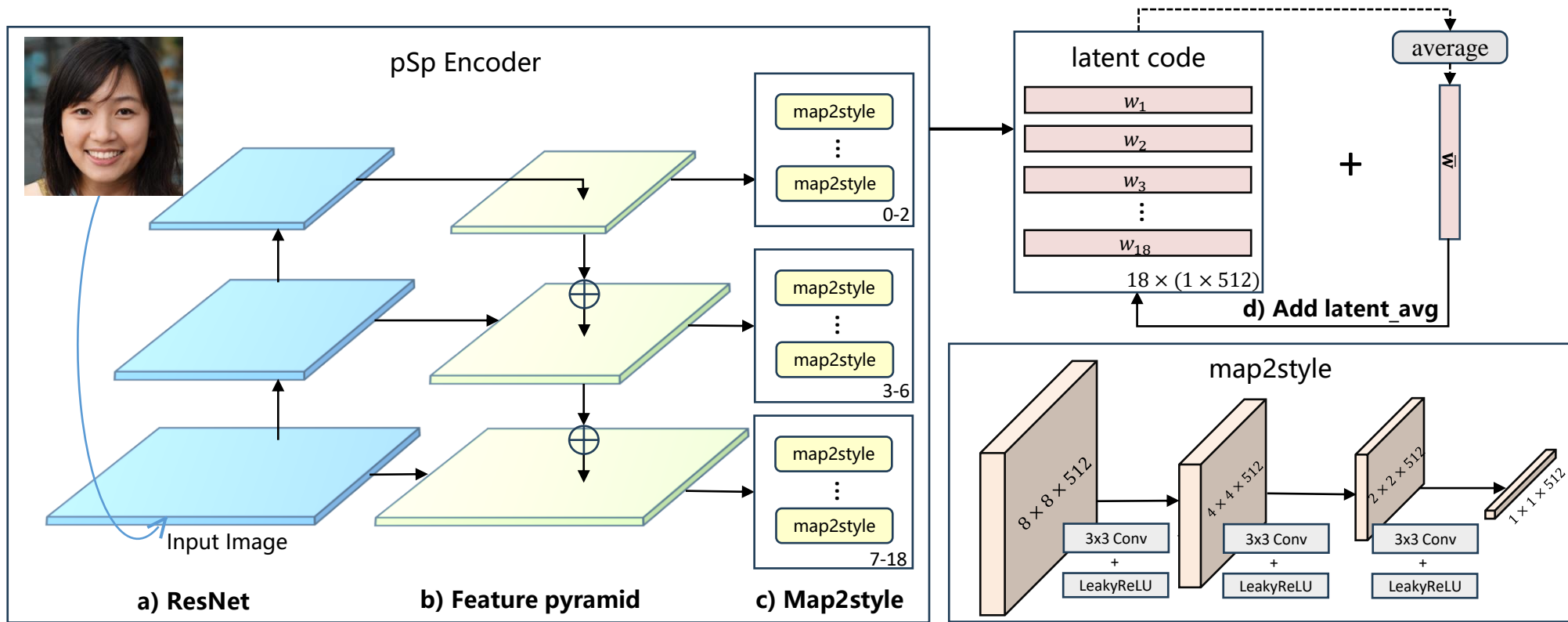
$\bar{w}$

a) ResNet

b) Feature pyramid

c) Map2style

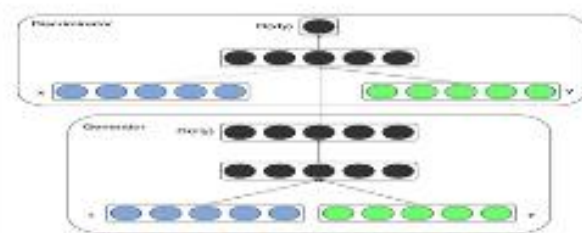
d) Add latent\_avg







Extracting semantic features of face and encrypting transmission



GAN I



Cloud storage of semantic secret key



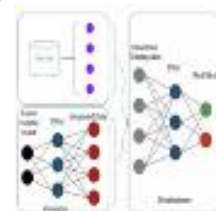
Query human face terminal



Face Detection & Gaussian encryption



video local storage



GAN II



Results output

