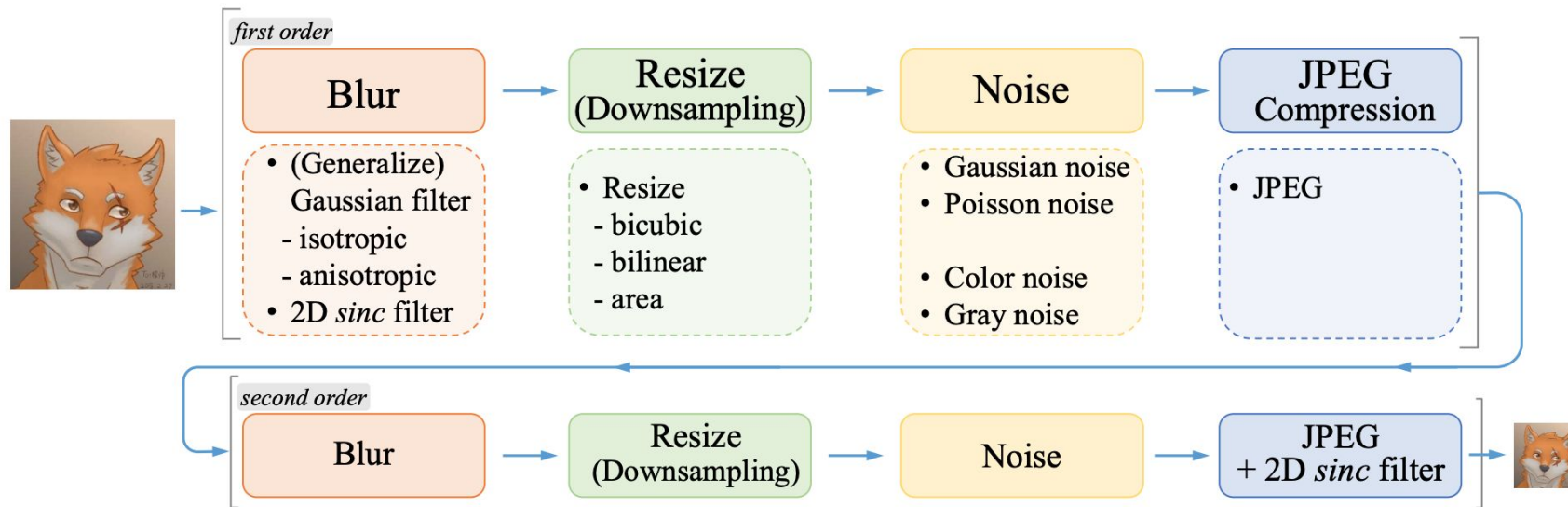
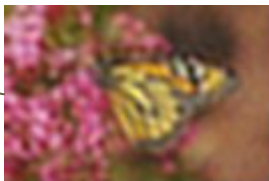
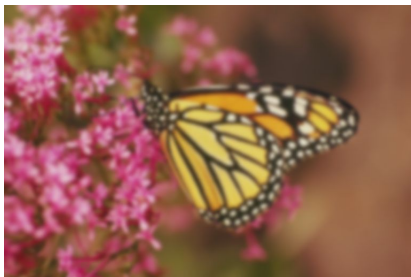
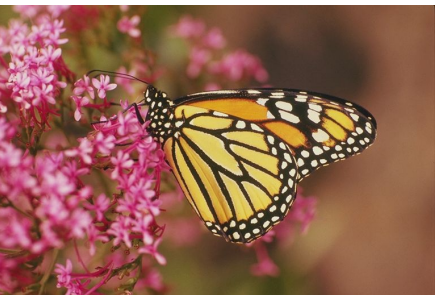

Real-ESRGAN

指導者：莊永裕教授
學生：資工三 葉乃瑄

High-order-degradation



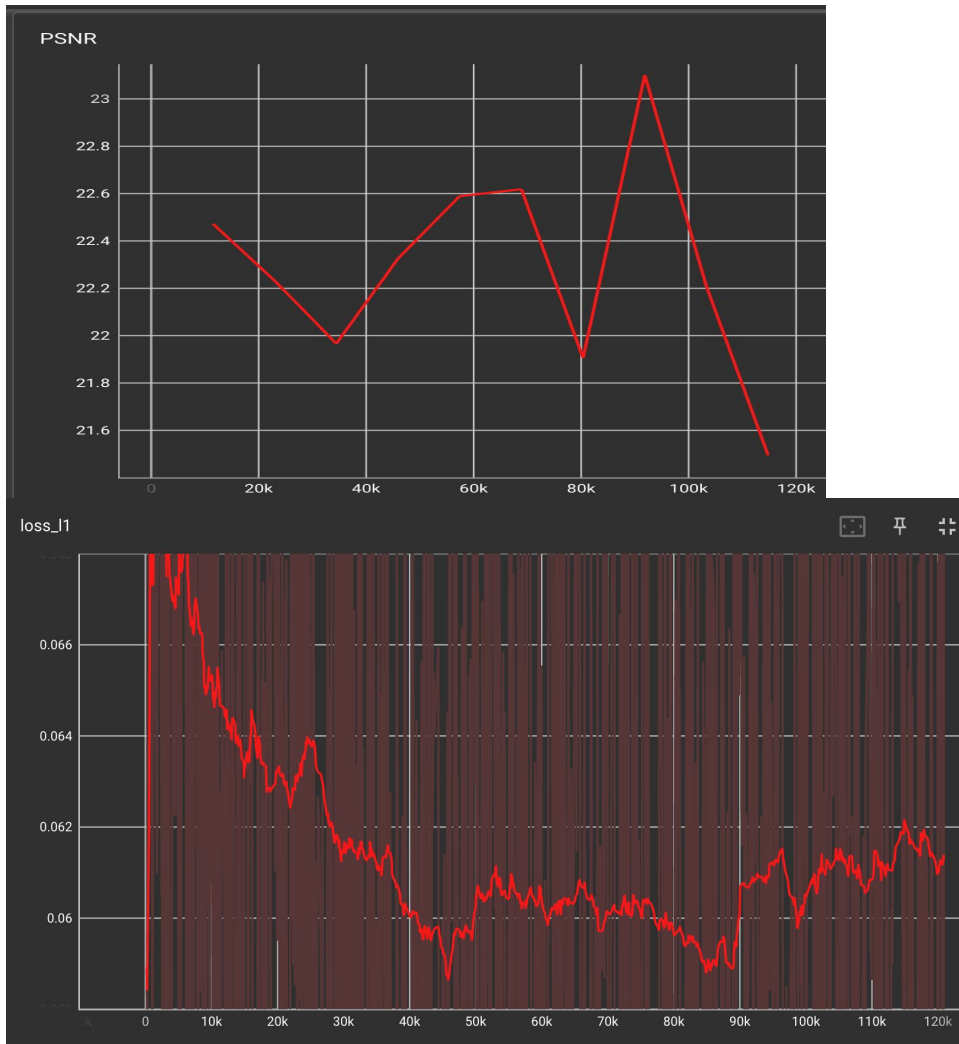
High-Order-Degradation



Training Real-ESRNET

Settings:

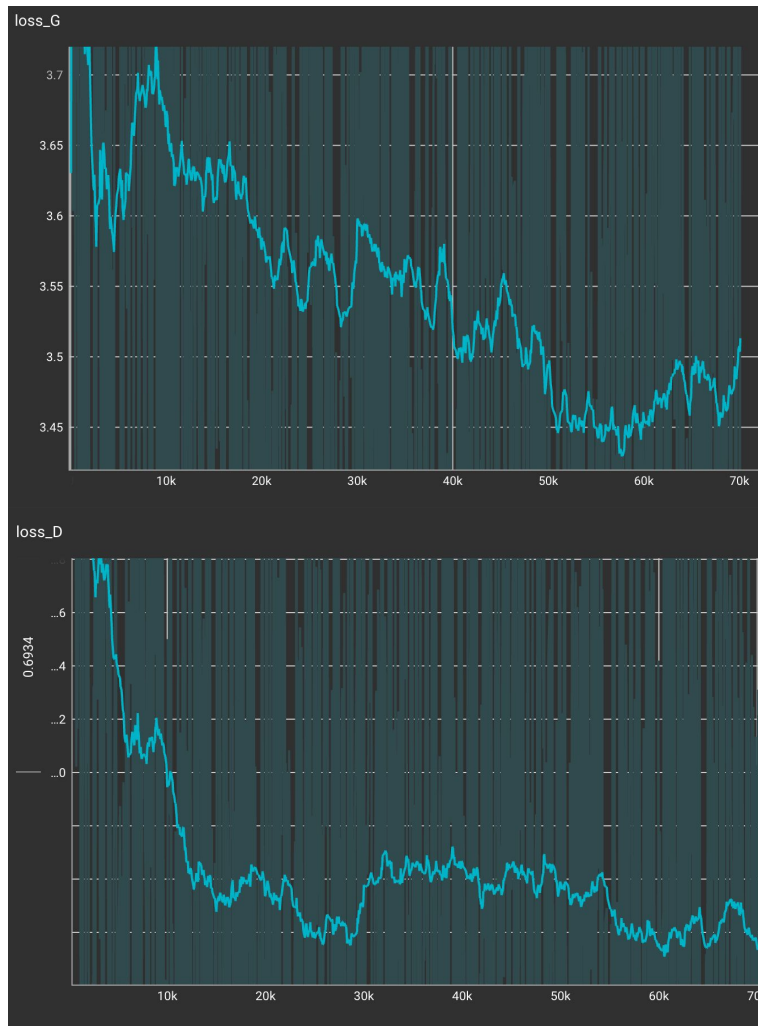
- Model: Prtrained ESRGAN
- Batch_size: 12
- Accumulation: 4
- Learning Rate: $2e-4$
- Max_Steps: 1000k
- Steps: 120k
- Loss: L1Loss
- Best PSNR: 23.1



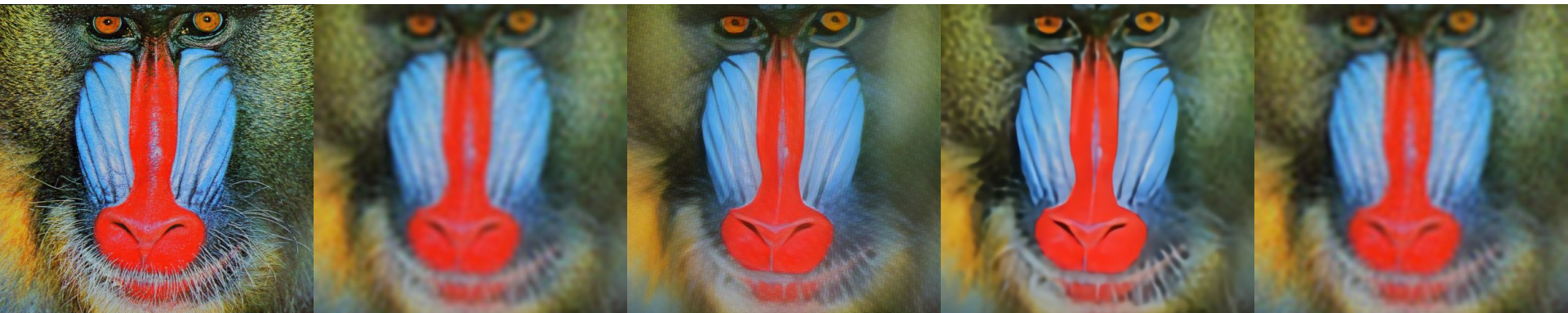
Training Real-ESRNET

Settings:

- Model: Real-ESRGAN
- Batch_size: 8
- Accumulation: 6
- Learning Rate: $1e-4$
- Max_Steps: 400k
- Steps: 120K
- Best PSNR: 22.36



High-order-degradation Comparison



Ground Truth

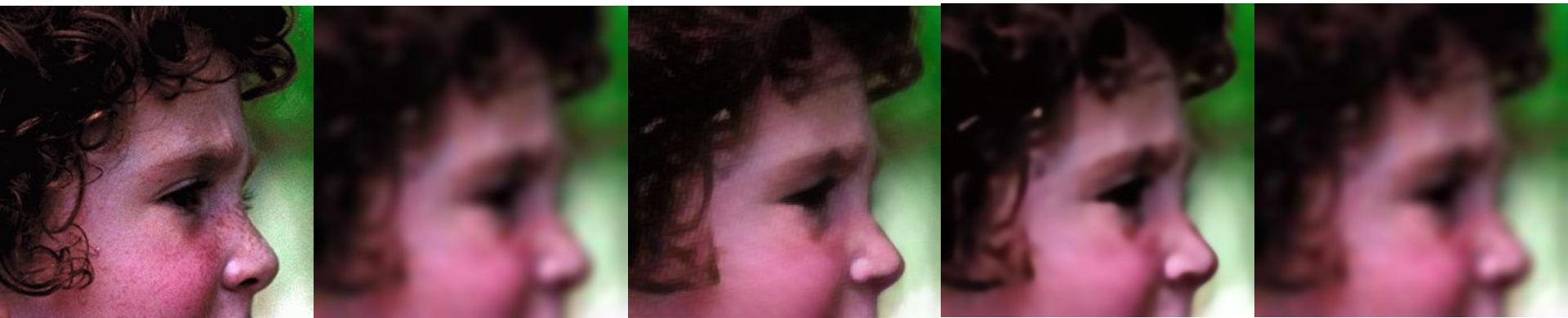
BICUBIC

Real-ESRGAN

Real-ESRNET

ESRGAN

High-order-degradation Comparison



Ground Truth

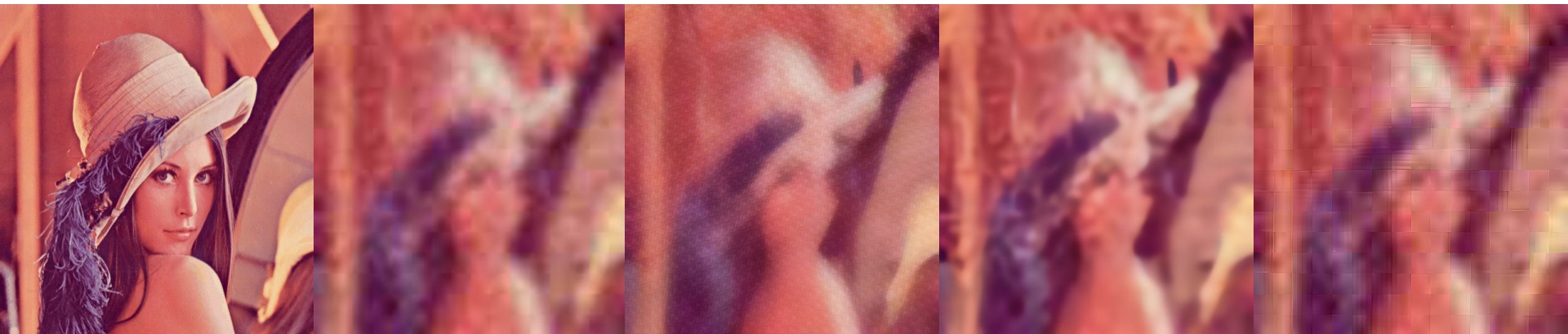
BICUBIC

Real-ESRGAN

Real-ESRNET

ESRGAN

High-order-degradation Comparison



Ground Truth

BICUBIC

Real-ESRGAN

Real-ESRNET

ESRGAN

High-order-degradation Comparison

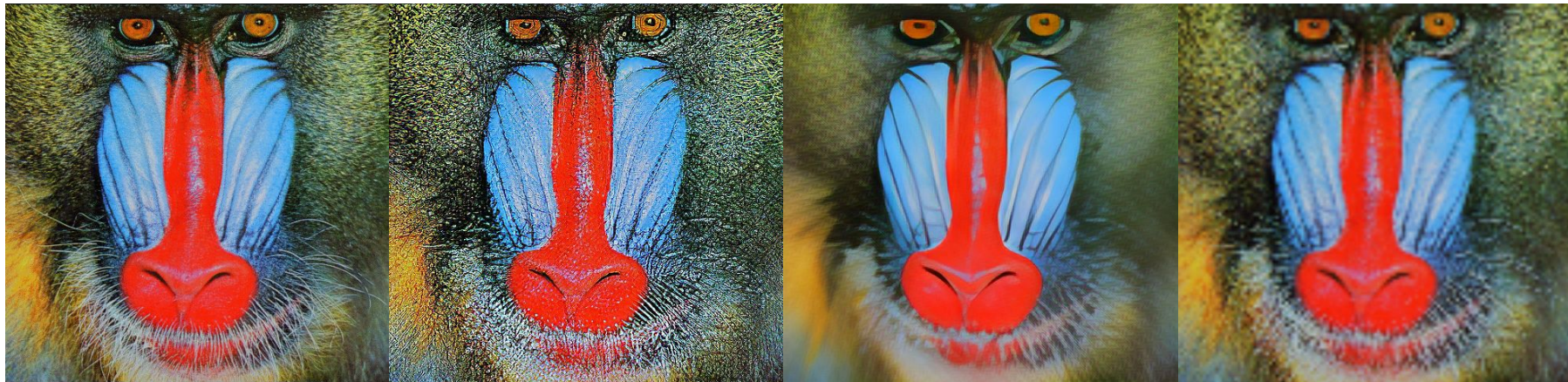


Ground Truth

ESRGAN

Real-ESRGAN

BICUBIC Comparison



Ground Truth

ESRGAN

Real-ESRGAN

BICUBIC

BICUBIC Comparison

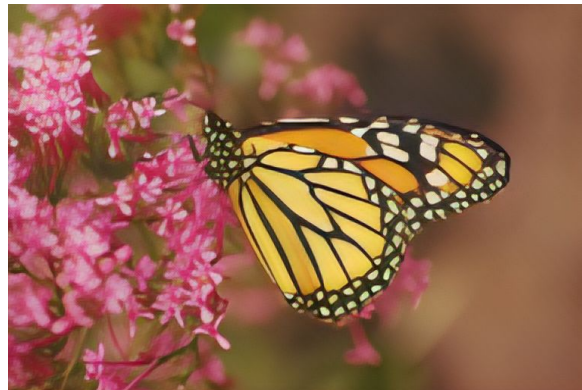
Ground Truth



ESRGAN



Real-ESRGAN



BICUBIC

