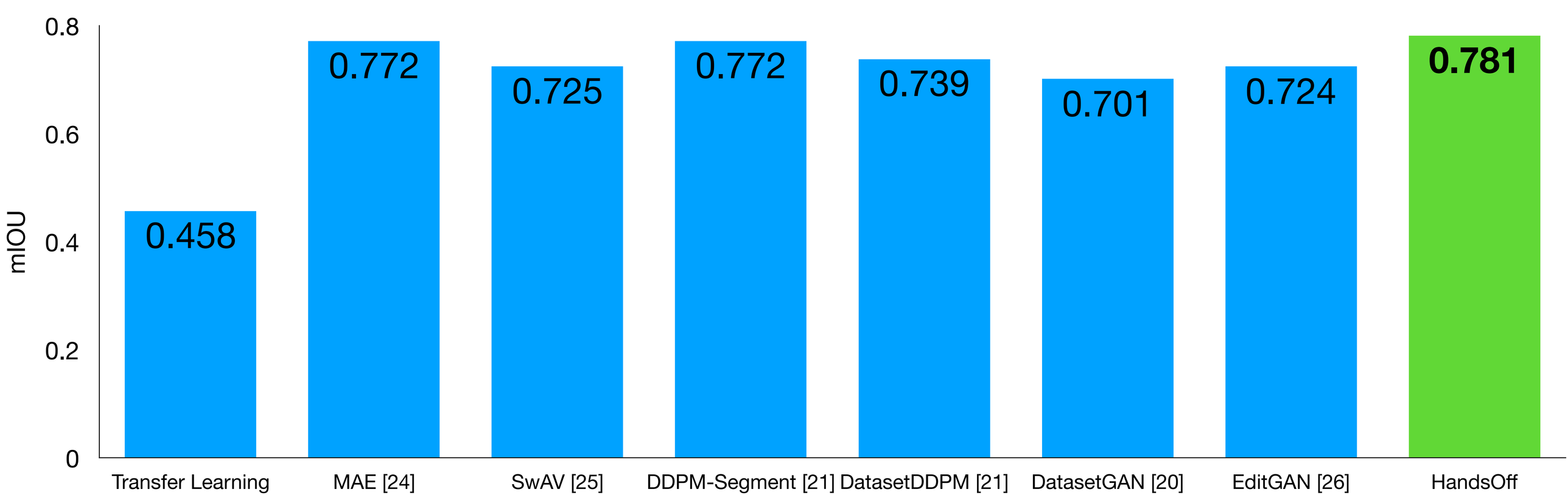
Evaluation results: CelebAMask-HQ

Linear probing of SSL models

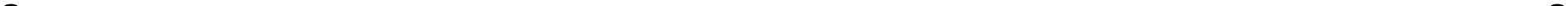
Diffusion-based baselines

GAN-based baselines

Previous GAN-based SOTA


mIOU
0.8
0.6
0.4
0.2
0
0.458
0.772
0.725
0.772
0.739
0.701
0.724
0.781
Transfer Learning
MAE [24]
SwAV [25]
DDPM-Segment [21]
DatasetDDPM [21]
DatasetGAN [20]
EditGAN [26]
HandsOff

Few-shot synthetic dataset generation approaches



Diffusion-based SOTA

[24] He *et al.* (2022)

[25] Caron *et al.* (2020)

[21] Baranchuk *et al.* (2022)

[26] Ling *et al.* (2021)

[20] Zhang *et al.* (2021)

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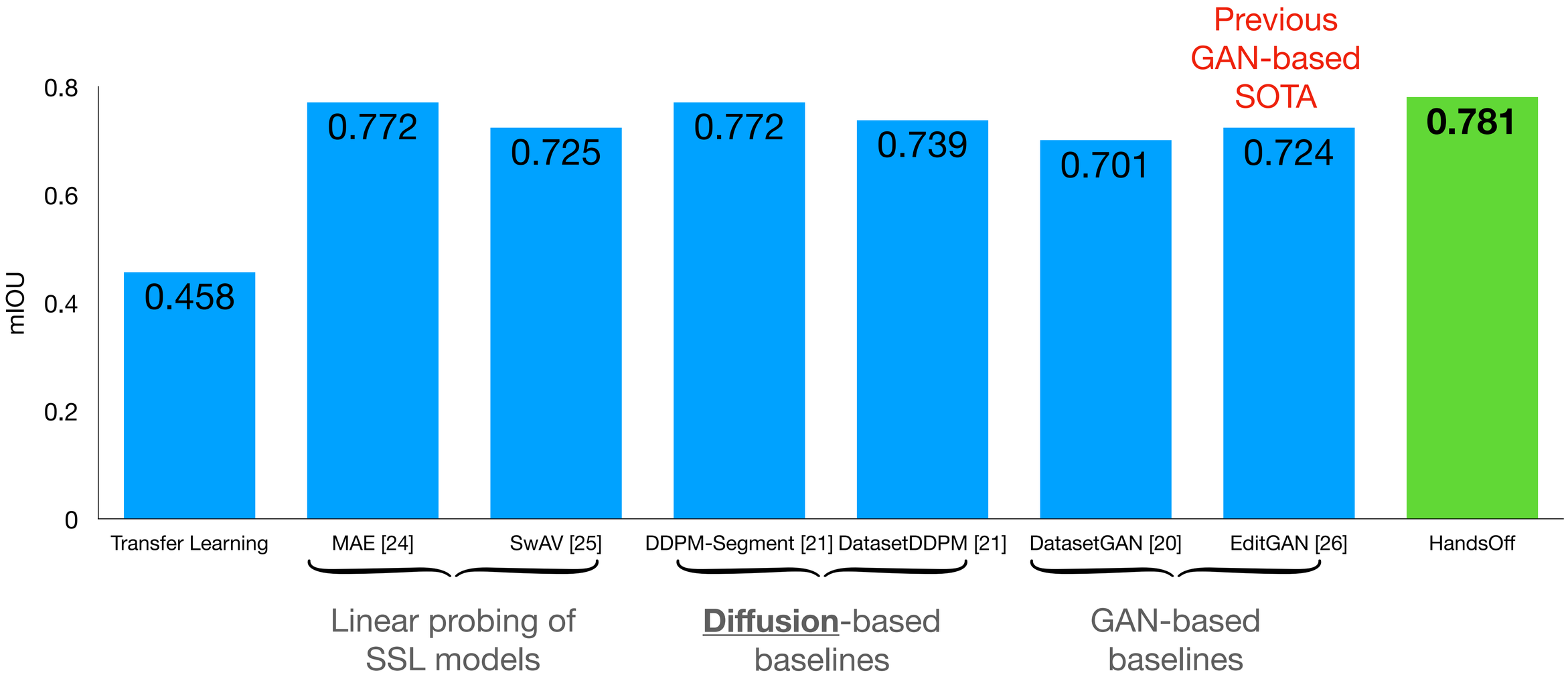
Evaluation results: CelebAMask-HQ



[24] He *et al.* (2022) [25] Caron *et al.* (2020) [21] Baranchuk *et al.* (2022) [20] Zhang *et al.* (2021) [26] Ling *et al.* (2021)

Aim 4 summary

We can use existing tools for different applications (e.g., image editing) to remove human annotators in synthetic dataset generation pipelines!

Publication: Conference paper at CVPR 2023 (Highlight Award)