## (a). Visual examples of the proposed DF40 dataset.

## Face Swap (FS).

Total number of FS: 10

MobileSwap

SimSwap

BlendFace



Face Reenact (FR)

Total number of FR: 13

SadTalker



Lia



Total number of EFS: 12

**Entire Face Synthesis (EFS)** 



StyleGAN-XL





Face Editing (FE) Total number of EFS: 5

StyleCLIP



StarGANv2



CollabDiff



Remaining open-set Synthesis deepfakes

Total number: 4

HeyGen



DeepFaceLab MidJourney-6 WhichIsReal





Statistic Details of DF40:

Known Domains:

1. Num of FS: 9 2. Num of FR: 12

3. Num of EFS: 10

Total Num: 31

Unknown Domains:

1. Num of FS: 1;

2. Num of FR: 1;

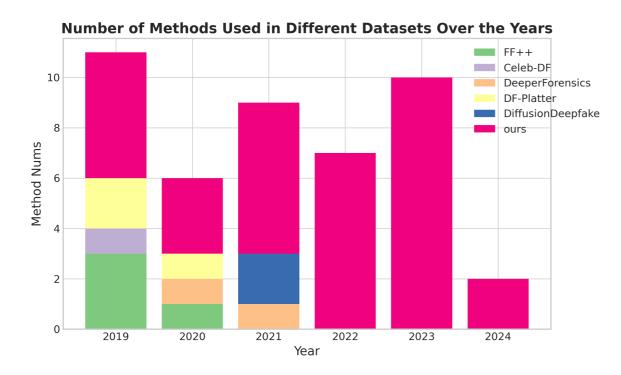
3. Num of EFS: 2;

4. Num of FE: 5

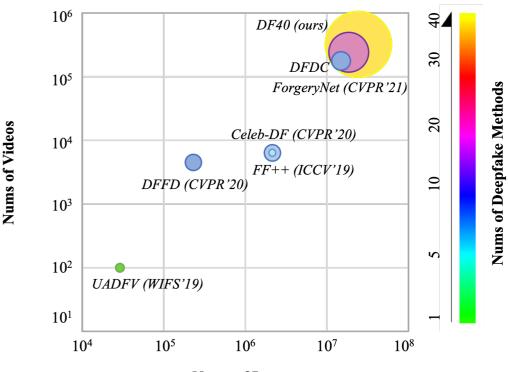
Total Num: 9

**Note:** *Known domains* refer to real data from *FF*++ and *CDF*, while unknown domains are those from other real datasets

## (b). Statistic comparison of forgery number used in different datasets



## (c). Comparison with other dataset in *diversity* and scale.



**Nums of Images**