**DeepFake Detection Datasets**

**1) Face DeepFake Detection Challenge Dataset**

Data Description below:

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| --- | --- | --- |
| Dataset | # Images | Data Description |
| CelebA | 5000 |  |
| FFHQ | 5000 |  |
| StarGAN | 1000 | CelebA images were manipulated |
| GDWCT | 1000 | CelebA images were manipulated |
| AttGAN | 1000 | CelebA images were manipulated |
| StyleGAN | 1000 | images were generated considering FFHQ as the input dataset |
| StyleGAN2 | 1000 | Images were generated considering FFHQ as the input dataset |

Dataset: <https://iplab.dmi.unict.it/Deepfakechallenge/>

Papers:-

1) Original Challenge Paper summarizing Top Results Reported in the challenge:- ‘The Face Deepfake Detection Challenge’. (published on 28 September 2022)

Paper Link:- <https://doi.org/10.3390/jimaging8100263>

Summary:-

This papers describes Top Results obtained by different Teams on this dataset in this challenge. So, those Teams have not done Random Sampling instead they have used Imbalanced data (10,000 real Images and 5000 Fake ones) as provided by the challenge.

2) Another recent paper (published on ) that used above dataset:- ‘An Improved Dense CNN Architecture for Deepfake Image Detection’. (published on 02 March 2023)

Paper Link:- <https://doi.org/10.1109/ACCESS.2023.3251417>

Summary:-

Authors tried balancing the dataset and used total 5000 real and 5000 fake images and then did augmentation.

**2) 140k Real and Fake Faces:- 88.1 %**

Data Size:- 70k real faces (from Flickr) and 70k fake faces (generated by StyleGAN)

Dataset Link:- <https://www.kaggle.com/datasets/xhlulu/140k-real-and-fake-faces>

Papers Link:- 1) <https://arxiv.org/ftp/arxiv/papers/2302/2302.10280.pdf> (very recent, this year)

2) <https://www.hindawi.com/journals/cin/2021/3111676/#data-availability> (16 Dec 2021)

**3) Real and Fake Face Detection (Computational Intelligence and Photography Lab, Department of Computer Science, Yonsei University)**

Data Size:- The dataset contains 1081 images of real and 960 images of fake faces.

Dataset Link:- <https://www.kaggle.com/datasets/ciplab/real-and-fake-face-detection>

Paper Link:- 1) https://www.mdpi.com/2076-3417/12/19/9820#B18-applsci-12-09820