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Project Name

Bridge the Domain-Gap: Facial Landmarks with Fake-it Dataset

Description

- Design and train a facial landmarks model on the provided CG dataset from Microsoft, and test your model on real world faces. Use a deep neural network framework of your choice (Pytorch or Tensorflow, etc) as well as other open source libraries for Python (OpenCV, dlib) to design and test various model architectures suitable for inference on consumer GPU hardware.

- Bonus tasks of designing a model to run in real time (30 fps), determining the minimum viable dataset size for crossing domain gap, and identifying which data augmentation techniques offered the most improvements to the models accuracy.

- Resources:
  https://microsoft.github.io/FaceSynthetics/

Datasets

https://github.com/NVlabs/ffhq-dataset
https://paperswithcode.com/dataset/celeba-hq

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