BOBKOV DENIS

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Education

Higher School of Economics Moscow
Faculty of Computer Science (ML and applications spec) *Sep. 2019 – June 2023*
- Applied Math and Information Science, 9.12 GPA

Higher School of Economics Moscow
Faculty of Economic Science *Sep. 2020 – June 2022*
- Financial Markets, 9/10

Projects

Style-Big GAN github.com/retir/Style-Big-GAN
- It is a 3rd course research project devoted to combining Style-GAN and Big-GAN models
- We researched methods of scaling up GAN's and impact of adding attention layers in models
- As a result we improved FID of generated images from 6.27 to 4.17 and IS from 9.4 to 9.78
- Universal starter for GAN models written on torch
- Allow you to select parts for your network such as generator, discriminator, loss and etc.

ASR model https://github.com/retir/dla_project1
- Implementation of DeepSpeech v2 ASR model
- On LibriSpeech test-other dataset achieved CER is 0.103 and WER is 0.224
- Source code support LM's and other ASR architectures

Telegram Notification Bot github.com/retir/Telegram-notification-bot
- Bot sends custom notifications to users
- Users can select the body, time, and frequency of notifications sent

Work Experience

AIRI Internship Nov. 2022 - present
- The task is to edit human faces with pretrained StyleGAN 2
- New encoder architecture and training pipeline, allows edit images much naturally
- Improved inversion LPIPS from 0.67 to 0.31, L2 from 0.012 to 0.005, FID from 10.86 to 5.85, achieved new SOTA
- The paper will be submitted to the A-A* level conference

Additional courses

Tinkoff Applied Statistic Certificate link
- Parameter estimation and A/B testing
- Production analysis

Machine Learning and Data Analysis Certificate link
Supervised Learning
- Linear models, Random forest, Basic Neural networks

Databases Certificate link
- Relational databases
- SQL queries

Neural Networks and Deep Learning Certificate link
- DL for Regression and Classification
- FC and Convolutional Models

Skills

Languages: Python 3, SQL, C/C++
Spoken Languages: Russian, English
Tools: Jupyter Notebooks, Git, SSH, LaTex, Apache Hadoop, Docker
Libraries: PyTorch, NumPy, Pandas, MatPlotLib, SciKit-Learn