

Taisia Penskaya

Saint Petersburg, Russia | +79210938070 | taya.penskaya@gmail.com | [LinkedIn](#) | [GitHub](#)

EDUCATION

Moscow Institute of Physics and Technology

Master of Science, Artificial Intelligence

Moscow, Russia

Expected Graduation Date: Jun 2023

ITMO University

Bachelor of Science, Computer Science

Saint Petersburg, Russia

2021

- Degree Thesis: *Pose Guided Person Image Generation with Detailed Segmentation*
- Course Thesis: *STatistical Inference Relief (STIR) feature selection*

Physics and Mathematics Lyceum No. 239

Secondary Education

Saint Petersburg, Russia

2017

WORK EXPERIENCE

Tinkoff

Computer Vision Researcher (Intern)

Remote

Feb 2022 - now

- Investigating and comparing current lipsync approaches (Live Speech Portraits, Wav2Lip, and others) to understand the general ideas used, their new capabilities, as well as their limitations on high-resolution datasets, like VoxCeleb2, HDTF
- Conducting research on lipsync metrics and losses to make nonblurring lips and improve quality of talking face generation via refining image quality, lip synchronization, and mouth shape

PoPolochkam

Computer Vision Engineer

Saint Petersburg, Russia

Aug 2021 - Nov 2021

- Created OCR system to recognize groceries type, cost, and other text in FoodTech domain data; OCR results were used to build a classifier that faced a 12% increase in F1-score on 5k image-label test manual data which led to 2% increased retention
- Implemented face recognition system to classify if a person reached employment age requirements

JetBrains

Machine Learning Researcher (Intern)

Saint Petersburg, Russia

Oct 2020 - Jul 2021

- Applied various deep learning models, including RNNs, Molecular Transformer and GNNs to retrosynthetic reaction prediction task on USPTO dataset, which contains 50k reaction examples
- Researched and implemented more than 10 metrics, based on ranking, similarity, and reaction properties for measuring the performance of retrosynthesis solutions

ADDITIONAL EXPERIENCE

Projects: [Hair Classifier](#), [Pose Transfer](#), [C++ Parser on Haskell](#), and more

Hackathons: Participant in 5+ hackathons, including multiple top 3 awards

Online Courses: GANs, Supervised / Unsupervised Learning, Statistics, and more

SKILLS

Skills: Deep Learning (GAN, VAE, NeRF), Classic Computer Vision (image filtering, edge detection, keypoint extraction, OpenCV), NLP (LSTM, word2vec, transformers, nltk, gensim), Machine Learning (trees, boosting, clustering), Python (PyTorch, surprise, optuna, wandb, flask), SQL (MySQL, MongoDB, PostgreSQL, Vertica), C++, Java, Haskell