+7(937) 071-04-24
Russia, Moscow
makoyan2001@gmail.com
linkedin.com/in/makartkar0

Artem Makoyan

Languages: Python3, C++, C, Go
github.com/MakArtKar
codeforces.com/profile/MakArtKar
leetcode.com/MakArtKar

Skills

Libraries Pytorch, Hydra, DVC, WandB, OpenCV, Sklearn, Numpy, Pandas, Scipy, Matplotlib, Seaborn, Optuna
Tools SQL, Linux, Bash, Git, LaTeX, MarkDown

Technical Experience

Middle ML Engineer/ Computer Vision Platform **Jul 2022 — Present**
Sber *Python 3, PyTorch, Hydra, DVC, OpenCV*

→Improved visual quality of background changing for video conferencing by using post processing algorithms

ML Research Intern / GAN adaptation **Jul 2022 — Present**
Artificial Intelligence Research Institute *Python 3, PyTorch, Hydra, WandB*

→Implemented Few Shot Image Generation paper in existing pipeline and compared it with our novel GAN adaptation approach

ML Developer intern / VR Team with V. Lempitsky **Jul 2021 — Oct 2021**
Yandex *Python 3, PyTorch, Tensorboard*

→Trained model that predicts human's alpha mask to improve the quality of a VR scene
- Prepared datasets with human alpha masks, read and compared papers on an alpha matting problem
- Trained an improved FBA Matting net without using trimaps

ML Research Intern / Mobile Authentication **Nov 2020 — June 2021**
Samsung R&D Department *Python 3, Numpy, Pandas, Sklearn, Tslearn, PyTorch*

→Worked on pipeline for mobile phone authentication by user's motion patterns with $82.2\% \pm 9\%$ accuracy on different devices
- Collected, preprocessed and handled data of 6 users' micro-movements on 6 devices
- Used ML algorithms and simple DL models for authentication, got 70% accuracy baseline

Software Engineer Intern / Software performance engineering team **Aug 2020 — Oct 2020**
Huawei *C, Octave, Catch2*

→Developed framework for updating open-source library faster and more convenient
- Developed system with non-trivial logic, simplified it with mediator, command patterns and OOP
- Developed testing platform: the same implementation on Octave and unit tests on C (Catch2 library)

Education

Bachelor in Computer Science, *Higher School of Economics* Sep 2019 — Jun 2023
Applied Mathematics and Information Science
Yandex School of Data Analysis, *Data Science* Sep 2020 — May 2022
Relevant courses:
- Machine Learning, Deep Learning, Deep Vision and Graphics, Computer Vision, NLP, Generative Models, Speech, RL
- Python, C++, Go, Algorithms and Data Structures
- Bayes Methods in ML, Optimization Methods in ML, Matrix Calculations, Statistics, Linear algebra, Probability theory

Projects

Automatic Detection of Means of Transportation on 3d Cargo Models **Dec 2021 — June 2022**
→Developed model for cloud segmentation with 0.95 IoU for cargo *Python 3, Pytorch, PyTorch3D*
- Calibrated cameras for cargo scanning, prepared data, implemented ESANet model

Telegram poll bot **Jul 2020 — Sep 2020**
→Developed telegram bot for creating polls containing images, videos, files and voice messages *Python 3, telebot, apiclient*
- Developed importing results to Google Sheets using Google Sheets API

Automatic computer activity monitoring **Aug 2020 — Sep 2020**
→Developed Windows application allowing automatic employee performance monitoring and analysing *C++, GRPC, ProtoBuf*
- Implemented on C++ using grpc and protobuf for data transfer, access to information by WinAPI

Competitions

- **Top 8%** in Google Hash Code. **Top 50** in Google Kick Start. **Top 350 (top 0.8%)** in Google Code Jam Feb, May, June 2020
- Awards in All-Russian Olympiad: 33^{rd} place in **Informatics** and 8^{th} place in **Maths** over 20000 participants Apr 2018, 2019