

# Artem

---

## PROFILE

MIPT graduate, MSc (2018). Has 8 years of software development and computer vision experience. Experience: Sticker.Place, Artifit, Skinive, Sberbank. Kaggle master.

Projects in ML: face recognition, face anti-spoofing, human pose estimation, action recognition, gun detection from surveillance camera, skin lesion detection and recognition.

Technical skills: python, pytorch, pytorch-lightning, ML, DL, detection, pose-estimation, metric-learning, GAN, flask, fastapi, gunicorn, postgresql, java, c++, bash, docker.

---

## EMPLOYMENT HISTORY

Jan 2023 — Present

### Computer vision engineer, Greenosoil AG

I'm working on computer vision problems in GreenoSoil AG. I improved existing models for field segmentation and classification using satellite images data. Also I developed pipeline for machine learning models on Airflow, what allowed dramatically improve productivity of department.

May 2018 — Aug 2022

### Computer vision engineer, Sberbank

Moscow

Sberbank is the largest russian bank with more than **96.2 million** clients. Its mobile application **MAU** is more than **65 million**. Bank also has approximately **70.4 thousand ATMs** and **24501 offline offices** across the country.

I built and improved various deep learning models for biometry stack, which are used across different streams (mobile application, ATM, etc). Our face matching algorithm achieved top industry solutions in both speed and accuracy. Also, I implemented submission package for NIST FRVT competition, using c++, cmake, opencv and onnxruntime.

- Face recognition model achieved **~200 ms on x86** cpu execution time with **~0.01 FAR at 1e-3 FRR** on IJBC like private dataset validated by external company.
- **Organized a leaderboard** with our models to make progress more clear for team and management.
- Tech stack: pytorch, pytorch-lightning, onnxruntime, numpy, scipy.

Jun 2020 — Sep 2022

### Computer vision engineer, Artifit

Moscow

Artifit is a startup which helps people to do home fitness with ease.

Developed an accurate pose estimation model for running on iOS. A real-time performance was achieved with high accuracy. Also I implemented skelenton-based action recognition for pose analytics (repeat counts, errors).

- Both low latency on mobile device (**40 fps**, iPhone 8) and high accuracy were achieved ( **~95 PCKh**)

Oct 2019 — Present

### Computer vision engineer, Skinive

Co-founded Skinive - skin vision solution, that helps people to prevent skin cancer. With my co-founder we got a prize on a hackathon for chat bot, which can say whether mole is dangerous or not. Then we developed it into a web service with multiple paying clients. We did **>1M** skin checks. I was responsible for building backend and data science from raw data to web service. Our project raised **~1M** of investment funding. Our application had **>150k installs**.

Things I was responsible for in Skinive:

- Backend for models and mobile application
- Labeling tool for enriching dataset
- Deep learning models and data analysis

Tech stack: AWS, pytorch, onnxruntime, docker, sql, gunicorn, flask.

Aug 2017 — May 2018

### Computer vision engineer, Sticker.Place

Moscow

Developed modules for face parsing including human race recognition, hair segmentation etc.

Oct 2016 — Aug 2017

Junior computer vision engineer, Sberbank

Moscow

Developed demo for anti-spoofing with Intel Realsense camera using 3 modalities - depth, rgb and ir.

EDUCATION

Sep 2016 — May 2018

MSc, Moscow Institute of Physics and Technology

Moscow

GPA 4

Sep 2012 — May 2016

BSc, Samara National Research University

Samara

SKILLS

Linux

Python

Git

Computer Vision

OpenCV

Pytorch

C++

LANGUAGES

English

C1

Russian

Native speaker