

EDUCATION

- Ph.D. in Computer Science** 2022 - 2025
Free University of Bozen-Bolzano (unibz) | Bolzano, Italy
Working in the area of Audio Processing and Speech Recognition
- M.Sc. in Digital signal and image processing** 2018 - 2020
National Research University of Electronic Technology - MIET | Moscow, Russia
Thesis title: Classification of the stages of the process of laparoscopic cholecystectomy using convolutional neural networks.
- B.Sc. in Applied math** 2014 - 2018
National Research University of Electronic Technology - MIET | Moscow, Russia
Thesis title: Method of Fractal compression of grayscale images.

WORK EXPERIENCE

- Machine Learning Engineer / Researcher** Jun 2020 - Nov 2022
DSSL | Remote
- Worked on researching and developing a highload inter-camera tracking system.
 - Contributed to the development of a face recognition system, working on detection, re-identification, tracking, and attributes classification.
 - Created a system for automatic performance measurement of detectors within the CCTV platform.
 - Worked on a license plate recognition system, including tasks such as vehicle detection, tracking, and optical character recognition (OCR).
 - Developed a camera image quality indicator.
- Software Engineer** Oct 2019 - Jun 2020
DSSL | Moscow, Russia
- Implemented and maintained the integration of various IP devices, utilizing HTTPS, SDKs and specific binary protocols.
 - Successfully integrated a new family of cameras, enhancing the versatility and coverage of the CCTV platform.
 - Led the integration of a new access control system, bolstering the security and efficiency of operations.
 - Employed robust testing and troubleshooting methodologies to ensure the reliable performance of integrated systems.
- Software / Computer Vision Engineer** May 2017 - Oct 2019
Elvees, Computer Vision Lab | Moscow, Russia
- Worked on implementation of computer vision and neural networks library OpenVX.
 - Implemented benchmarking platform for computer vision library.
 - Optimized and ported image processing algorithms for efficient execution on digital signal processors, improving performance and efficiency.

QUALIFICATIONS

Programming Languages: Python, C++, MATLAB.

ML stack: PyTorch, NumPy, SciPy, OpenCV, pandas, scikit-learn, PyTorch Lightning, Nvidia NeMo, huggingface, albumentations.

Development stack: Python, C++20, boost, OpenCV, gtest.

Tools and technologies: Linux, git, bash, L^AT_EX, DVC, TensorRT, onnxruntime, Docker, SQL, W&B, slurm, mercurial, CMake, conan.

Teaching/mentoring experience: Have been responsible for checking students homeworks and labs in university, have experience in mentoring new employed colleagues at work.

Languages: Russian (native), English (C1), Italian (B2), German (A2).