

Professional Profile

LYZHIN DMITRY ALEXANDRO VICH

Chelyabinsk region, Zlatoust dmitry.lyzhin2014@yandex.ru 89193356988

- My professional profile includes graduating from university with a GPA of 5.0, several diplomas for olympiads, taking offline and online courses in various areas of development, a year of work in a company on computer vision projects, and an irresistible interest in the field of IT.
- Education
- In 2021, I received a bachelor's degree with honors from South Ural State University with a degree in Software Engineering. In addition, during my studies, I took various offline and online courses in various areas of development, this is described below.

Professional Experience

Since August 2021, I have been working remotely at Donteco on the Cubic-Al platform, which includes a web and mobile application for video surveillance with various intelligent modules, such as people counting, queue control, re-identification of a person on different cameras, tracking of human interactions with a given area, determining the gender and age of people, determining empty spaces on the shelves in stores, heat maps of the movement of people depending on gender and age, and much more. The last two I created almost from scratch. Basically, the development took place in the Python programming language, but recently the system has been ported to the Golang programming language to optimize the system, so at the moment I am actively interacting with the Golang language. I also independently developed and implemented the license plate recognition module into the platform. The module includes a model for searching for edge points of license plates frames using a modified RetinaFace, and a Deeplabv3 segmentation model for pixel-by-pixel classification of license plates into license plate character classes. In the process of work, Linux, Docker, Jenkins, PyTorch, Cvat, Triton, Onnx, PostgreSQL, Clickhouse, Numpy, OpenCV were actively used.

Projects

- License plate recognition as a job in Donteco on the CubicCV 2022 platform.
- Cameradar that finds active cameras on the specified subnet with path, username and password verification implemented in Golang as a job in Donteco on the CubicCV 2022 platform.
- Recognition of empty spaces on the shelves in stores as a job in Donteco on the CubicCV platform 2022.
- Heat maps of people moving on cameras depending on gender and age (segmentation people model, face detection model, age-gender recognition model) as a job in Donteco on the CubicCV platform 2021-2022.
- Development of an application for detecting and fixing traffic violations on video using neural network technologies (crossing a solid line, driving through a red traffic light) as a bachelor's degree at SUSU 2021 (detectron2, PyTorch, Sanic, PostgreSQL, docker).
- The backend part of the messenger as a final project in Napoleon IT backend development courses 2021 (Sanic, Marshmallow, SQLAlchemy, PostgreSQL, docker).
- Virtual webcam driver for applying an avatar to a person's face (like a Snap) as a final project in Machine learning courses 2020.
- Development of the mobile application "Common Friends and Groups Vkontakte" as a final project in Android development courses 2019.

Technical Skills

- Python high level based on various backend and machine learning projects at university and at work
- C++ high level of knowledge of the standard library and data structures of the language based on studying at the university and solving olympiad problems.
- Golang, C#, Kotlin, Javascript intermediate level, used for a short time in different projects.
- Machine learning skills: Numpy, OpenCV, PyTorch, OpenVINO toolkit, Triton Inference Server, CVAT, Sklearn, Pandas.
- Backend skills (Python): Flask, Sanic, Django.

Linguistic Skills

- Russian language native.
- English B1/B2 level was at the university.

Certificates

Certificates of completion of offline courses:

- Napoleon IT, Junior Backend Dev Courses 2021 (Chelyabinsk)
- Everypixel, Machine learning courses 2020 (Chelyabinsk)
- Napoleon IT, Android Development Courses 2019 (Chelyabinsk)
- Intersvyaz, UpGrade 2.0 courses 2018 (Chelyabinsk) Diplomas in Olympiads:
- XII KFU Open Team Programming Olympiad 3rd degree diploma 2020
- Open International Student Internet Olympiad in Informatics 3rd degree diploma 2019
 - Online courses:
- Machine Learning 2022 (coursera.org)
- Neural networks and text processing 2020 (stepik.org)
- Introduction to Data Science and Machine Learning 2019 (stepik.org)

Hobbies

• My hobby is doing sports like going to the gym, besides that I like to watch movies and listen to music.