## **Dmitry Barsukov**

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GitHub: https://github.com/riZZZhik

Professional Summary Experienced Machine Learning Engineer with over 5 years of hands-on expertise in developing AI-driven solutions, specializing in Text-to-Speech services, computer vision,

and deep learning optimization.

Skilled in deploying scalable and efficient AI systems using a wide range of model servers, including Triton and OpenVINO, tailored to different frameworks and performance needs.

Extensive experience working with frameworks like TensorRT, ONNXRuntime, Py-Torch, and TensorFlow, ensuring seamless integration and optimization for various deployment scenarios.

Proficient in setting up comprehensive observability systems using Grafana, Prometheus, and Kibana to monitor and enhance the performance and reliability of distributed AI services

Proven record of improving system performance, reducing latency, and delivering robust AI solutions to meet business objectives.

RESEARCH AREAS OF INTEREST

 ${\it Machine Learning; Deep Learning Model Optimization; Computer Vision; Speech Technologies}$ 

PROGRAMMING SKILLS

**Languages**: Python (advanced), Go (advanced), C/C++ (average) **Deep Learning Frameworks**: PyTorch, TensorFlow, Keras

Optimization frameworks: Torch compile, TensorRT, Tritonlang, OpenVINO, Tri-

ton Server

Technical skills: OpenCV, Torchaudio, Docker, Kubernetes, Git, CI/CD, Observ-

ability, Linux

Languages Russian (native); English (advanced)

MTS AI

EMPLOYMENT
AND EXPERIENCE

Senior Python Machine Learning Engineer

Development of a Text-to-Speech service that outperforms top competitors in the Russian language.

Main responsibilities: model inference optimization, deployment, and supporting business logic.

**Technologies:** Python, PyTorch, WandB / ClearML, Triton Server, Observability, Docker + Kubernetes, Git + CI/CD

SIRIN March 2021 - January 2022

Middle Python Machine Learning Developer

Development of a service using computer vision for automatic opening of car barriers. Main responsibilities: researching model architectures, finding/generating datasets, training, and deploying models.

Achieved 99% accuracy in recognizing Russian license plates and 90% in recognizing any license plates.

June 2022 - Present

**Technologies:** Python, PyTorch, OpenCV, Docker + Kubernetes, OpenVINO + Triton Server, Observability (Grafana, Kibana, Prometheus), Git + CI/CD

ITMO University

January 2020 - December 2020

Python Machine Learning Developer

End-to-end development of a service for building facade segmentation. **Technologies:** Python, TensorFlow + Keras, OpenCV, Docker, Git

**SPIIRAS** 

August 2018 - October 2020

Junior, then Middle Python Machine Learning developer

 $\label{lem:condition} \begin{tabular}{ll} End-to-end development of a service for recognizing the faces of employees. \\ \begin{tabular}{ll} Technologies: Python, TensorFlow + Keras, RealSense DepthCamera, OpenCV, \\ \begin{tabular}{ll} Pothon (Continuous Continuous Continuo$ 

Docker, Git

EDUCATION

**Higher School of Economics** 

Moscow, Russia (Remote)

Applied Mathematics and Information Science.

September 2023 - Present

**St Petersburg University Academic Gymnasium** Faculty of Physics and Mathematics

Saint-Petersburg, Russia September 2020 - June 2023