


# Alexander Shmorgunov


## Machine learning Engineer

English: Upper-Intermediate  
Russian: Native

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@Owlus 

sashashmor 

- **3+ years** of **MLE/DS** experience
- **3+ years** experience in **top-tier Russian tech companies**
- Background in **Recommender Systems, Computer Vision, AI in Medicine** and **Natural Language Processing**

## Experience

 **VK** *Largest Russian social network, originally invented by Telegram CEO Pavel Durov*

### Machine learning Engineer

08.2023–now

- Tested and **Integrated** i2i and recurrent deep learning models for recommender, which **added +50% relative in conversion rate**
- **Refactored** the recommender engine, removed unused and legacy code, **reducing the inference time by 20%**
- **Documented** the recommender engine and machine learning pipeline, **increasing** documentation coverage **from ~20% to ~90%**
- **Migrated** the entire machine learning pipeline consisted of **30+ Airflow jobs** and **30+ Python libraries** from **Hadoop and Spark** to **YTsaurus** with total **training time reduced by 2x**

 **Yandex** *Largest Russian tech giant, fifth most popular search engine – worldwide*

### Machine learning Engineer

02.2022–06.2023

- **Transferred** the Object Detection **Python&C++** FasterRCNN-based pipeline from **TensorFlow 1** Object Detection API to **TensorFlow 2** native implementation, adding support for **quality testing and hyperparameter-tuning** and speeding up training time **up to 2.5x**
- **Initiated** research and implementation of **YOLOv8** model that aimed **1.5x reduction** in false detections and **2x inference speed up**
- **Collected** and processed about **2500 images** using an internal crowdsourcing platform to **add 5 new classes** to the existing object detection model

 **Kaspersky** *One of the world's leading cybersecurity companies*

### Software Engineering Intern

12.2020–02.2022

- **Integrated** an internal service into the team's product make pipeline using **make, TFS, shell**, and **Python scripts**
- **Optimized** make pipeline of the process of external product rebrandings, **speeding up** rebranding updates **from 3 days to 1 day**

## Education

**Moscow State University**  
09.2022–06.2024

**Master's** degree in **Computer Science**,  
"Intellectual Technologies in Medicine"

**Higher School of Economics**  
09.2018–06.2022

**Bachelor's** degree in **Computer Science**,  
"Applied Mathematics and Informatics"

## Honors & Awards

**Shopee – Product Matching**  
Kaggle, 03.2021

**Bronze medal, top 8%**  
leaderboard  
Competition for  
predicting similar  
products

## Hard Skills

- **Programming Languages:** Python, C++, C, SQL, YQL
- **Low-level:** Make, CMake, CUDA
- **Databases:** PostgreSQL, ClickHouse, HBase
- **Analytics:** Redash, Grafana, TensorBoard, Weights & Biases, A/B Testing
- **DevOps:** Docker, Gitlab CI/CD, Git, SVN, Team Foundation Server
- **ML Fields:** Recommender Systems, Object Recognition/Detection/Segmentation, Computer Vision, Natural Language Processing, CatBoost
- **ML R&D:** Tensorflow, PyTorch, Pandas, Scikit-Learn, Numpy, SciPy, OpenCV, Huggingface Transformers, TRL
- **MLOps:** Hadoop, Spark, YTsaurus, Airflow, Anaconda, Toloka
- **Management:** Mentoring, Hiring, Jira