

# **GERMAN LEONTIEV**

## ML-ENGINEER

### **TECHNICAL SKILLS**

Data Analysis Pandas, Numpy, Scipy Deep PyTorch, TensorFlow

Learning

BackendPython, FastAPI, FlaskMLOpsDocker, GitHub Actions, KubeflowVisualizationPlotly, Seaborn, MatplotlibDatabasesPostgreSQL, MySQL, ClickhouseOptimizationTensorRT, ONNX, OpenVINOClassic MLScikit-learn, XGBoost, OpenCV

#### **WORK EXPERIENCE**

Head of Al ♥ Webbee June 2023 - Present

- Developed a custom neural network using PyTorch for **any** type of advertisements, automating manual checks of tens of thousands of advertisement boards monthly.
- Trained a sales forecasting model for Melon Fashion Group using XGBoost, achieving 15% better accuracy compared to a statistical baseline, optimizing the logistics of the store network.

## Machine Learning Engineer @ MStroy

August 2022 - May 2023

- Created "German" (a virtual assistant) for the company, independently handling all stages of the project from requirement specification, task setting, and model selection to application architecture, API development, and production deployment, providing a new interface for 17,000 platform users.
- Developed a microservice for extracting tabular data from construction blueprints, automating the processing of over 40,000 documents.
- Designed a custom string search algorithm for documents, improving data processing speed tenfold, and later ported it to GPU for an additional 3x speedup.

## Machine Learning Engineer @ Aviavision → iPavlov

April 2022 - July 2022

- Trained models for segmentation and object detection on road scenes using 2 TB of data from Audi.
- Converted models to TensorRT format, increasing performance fourfold and achieving 30 FPS processing.
- Compiled the world's largest open dataset for forest fire detection, consisting of 57,000 images captured under various conditions.
- Trained a forest fire detection model and developed a web interface for video processing.

### **RESEARCH ACTIVITY**

## Machine Learning Biotech Researcher @ AGNI University

September 2022 - July 2023

- Trained models to predict material properties prior to synthesis using Python, PyTorch, and Scikit-learn.
- Documented various approaches to working with tabular data for material synthesis for a scientific article.
- Developed and trained a neural network to predict MOF behavior at different temperatures.

## Machine Learning in Healthcare

2024

• Trained an algorithm for classifying skin cancer diseases, including various melanoma types.

#### **EDUCATION**

- Bachelor's in "Heat Power Engineering" (Polytechnic University, St. Petersburg, 2019)
- Master's in "Machine Learning Engineering" (ITMO University, St. Petersburg, 2026)