Timofey Brayko

ML-Engineer
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SUMMARY

Machine Learning enthusiast with 3 years of experience specializing in CV and NLP areas. Gained practical experience applying tools such as PyTorch, Transformers, and RL paradigms through individual and group projects. Passionate about exploring Explainable AI and creating valuable DL solutions to solve complex problems.

EXPERIENCE - 3 YRS

PLATES DETECTION

May 2025 - Present | (Company Intership)
A project to detect and recognize car license plates in post-Soviet countries, aiming to build a solution that runs on a Raspberry Pi.

- Implemented Canny Edge and Hough algorithms with OpenCV.
- Trained D-Fine and YOLOv11 models for plate detection.
- Improved metrics and expanded dataset with a Semi-Supervised learning.
- Currently, enhancing safety by detecting vehicles in the frame.

ITECH INC UZBEKISTAN github.com/Shintifo/Signex

May – Oct 2023
Group project for stamps and signature detection.

- Trained YOLOv7 for detection and EfficientNet for signature recognition.
- Completed a full cycle of preparing data.
- Successfully bound Swagger API services with deployed models.

A-SHOT github.com/IU-Capstone-Project-2024/A-Shot

Apr - Sep 2024
A-Shot is a multiplatform tool that leverages computer vision to simplify the photo culling process for photographers.

- Integrated ML model in deployment with Torch + ONNX
- Conducted research on existing solutions
- Optimized SuperGlobal model for the project

HAKATONS

OZONCUP

Aug 2024
For the hackathon, our team had to train a model for recognizing cigarettes on the images to moderate products in an online store.

- Explored and trained BeiT, SWIN, EfficientNet
- Improved solution F1-score from 87.4% up to 97.79%

RESEARCH

TEXT COMPRESSION | Feb 2025 - Present

Participate in a study exploring a novel method of text representation by compressing sequences using BERT and T5 models.

- Conduct a literature review and found valuable research
- Modified and experimented with BERT and T5 architectures
- Analyze the intermediate results for meaningful insights

EDUCATION

INNOPOLIS UNIVERSITY

Bachelor of Computer Science
Expected: July 2026
Track of Applied Artificial Intelligence
GPA: 4.5 / 5.0

BEIJING INSTITUTE OF TECHNOLOGY

Bachelor of Computer Science
Feb - July 2024 | China
Exchange Program
GPA: 4.0 / 5.0

SKILLS

PROGRAMMING

- Python
- C/C++
- Java

TECHNOLOGY

PyTorch • Numpy • Pandas
Transformers • Sklearn • OpenCV
Spark • HIVE • Hadoop
NLTK • ONNX • PostgreSQL
Linux • Docker • LaTeX

ML EXPERIENCE

YOLO • CLIP • EfficientNet
VLM • ViT • MobileNet
Stable Diffusion • GAN • ResNet
BERT • GPT • T5
VLLM •

LINKS

- **Github:** Shintifo
- **LinkedIn:** timofey-brayko
- **Telegram:** Shintifo