Timofey Brayko

ML-Engineer
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SUMMARY

Machine Learning enthusiast with 2 years of experience specializing in NLP and CV areas. Gained practical experience applying tools such as PyTorch, Transformers, and VLLM through individual and group projects. Passionate about creating valuable DL solutions and seeking novel approaches to solve complex problems.

EXPERIENCE

ITECH INC UZBEKISTAN | GitHub Repo

May – Aug 2023

Group project for stamps and signature detection.

- Experimented with detection model YOLOv7 for signature detection and EfficientNet for comparison
- Collected, analyzed and preprocessed data for training
- Successfully bound Swagger API services with ML-system

RESEARCH

TEXT COMPRESSION | Feb 2024 - 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

PROJECTS

A-SHOT | GitHub Repo

May - Aug 2024

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

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

PLATES DETECTION | GitHub Repo

Oct - Dec 2024

This project implements logic for Automated License Plate Recognition by training a novel object detection model, D-FINE.

- Developed classical Computer Vision approaches with OpenCV
- Authored technical documentation for the project

HAKATONS

OZONCUP | ML ENGINEER

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 numerous Visual Transformers
- Improved baseline F1-score from 87.4% up to 97.79%
- Experimented with preprocessing approaches
- Greatly expanded and diversified dataset

EDUCATION

INNOPOLIS UNIVERSITY

BACHELOR OF COMPUTER SCIENCE
Expected: July 2026
Track of Applied Artificial Intelligence
Cum. GPA: 4.43 / 5.0

BEIJING INSTITUTE OF TECHNOLOGY

BACHELOR OF COMPUTER SCIENCE
Spring Semester 2024 | China
Exchange Program
GPA: 4.0 / 5.0

SKILLS

PROGRAMMING

- Python
- C/C++
- Java

TECHNOLOGY

PyTorch • Numpy • Pandas
Transformers • Sklearn • Spacy
NLTK • ONNX • PostgreSQL
Linux • Docker • LaTeX

LINKS

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