

SKILLS

- **Python** for **Computer Vision**, **NLP**, **Audio Signal Processing**. Good knowledge of Java, C#
- **Working with:** PyTorch, TensorFlow, Numpy, Pandas, Matplotlib, OpenCV, Seaborn, Scikit-learn
- **Other:** SQL, Linux, Git, basics of SLURM, working via SSH
- **Languages:** German (C1), English (C1), Russian (native), Ukrainian (native)

WORKING EXPERIENCE

- **Internship and Master Thesis @ Bosch** Germany, *October 2023 - May 2024*
Created pipelines for environment reconstructions using [NeRF's](#)
- **Working Student @ EDAG** Germany, *January 2023 - July 2023*
Developed deep learning based algorithms for the task of Object Detection.
- **Research Assistant @ LUH** Germany, *December 2021 - January 2023*
Created pipelines based on [VQ-VAE](#) and other (e.g.: [link](#), [link](#)) methods for Anomaly Detection.

EDUCATION

- **Master at Leibniz University Hannover** Germany
Machine Learning 2021-2023
- **Bachelor at Martin Luther University** Germany
Informatics 2018-2021
 - **Bachelor Thesis:** Deep Learning for Locating Seed Placements in Images (PyTorch)
[My Bachelor work](#) describing my understanding of the fundamental of Neural Networks, especially Computer Vision and creating and approaches for tasks of Semantic Segmentation and Object Localization
 - **Uni Praxis:** Correction of Street Spellings in Germany (TensorFlow)
I have implemented an RNN that was capable to detect and correct up to 85% of typos in street spellings.
[github link](#)
 - **Information Retrieval:** Pipelines for predicting quality of arguments and retrieving them.
[Paper](#), Top-1 Uni-team and Top-7 overall in [Touché @ CLEF](#) as team 'Luke Skywalker'
- **Bachelor at Odessa State Environmental University** Ukraine
Computer Science 2017-2021
 - **Bachelor Thesis:** Precision-Oriented Argument Retrieval
In this work I used pretrained deep learning models based on [BERT](#) to create precision-oriented argument retrieval pipelines. A big part of the work was also to create multiple fine-tuned models and compare them using different retrieval models.

PET-PROJECTS

- **FlowNet Simple Implementation:** [github link](#) (PyTorch)
Implemented a [FlowNet](#) to perform Optical flow estimation on the KITTI dataset.
- **SegNet Implementation:** [github link](#) (PyTorch)
I have implemented one of the most popular networks for semantic segmentation and applied it on dermoscopic images.
- **SincNet Implementation:** [github link](#) (TensorFlow)
In this Project I created a baseline described in [Paper](#) for Speaker Recognition task achieving 73% accuracy.