Vlad Shish

Junior Data Science & Machine Learning Engineer

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Summary

With over 3 years of experience in Information Technologies and more than 1 year in Data Science and Machine Learning, I possess a solid understanding of Machine Learning principles, including supervised and unsupervised learning, classification, regression, and clustering algorithms. I am familiar with Deep Learning architectures such as Convolutional Neural Networks (CNNs) and Recurrent Neural Networks (RNNs), and their applications in areas like computer vision and natural language processing. I have knowledge of data preprocessing techniques, feature engineering, model selection, and evaluation metrics.

My technical skill set includes proficiency in data analysis tools and libraries such as Python (NumPy, Pandas, Scikit-learn), and deep learning frameworks like TensorFlow and PyTorch. Additionally, I have participated in Kaggle competitions, applying my machine learning and data science skills to solve real-world problems and collaborating with a global community of data scientists.

Technical Skills

Python

Pandas

NumPy

Scikit-learn

TensorFlow

Matplotlib

Git

PyTorch

SQL

C/C++

Projects

- **Neural Network from scratch**
  Designed and implemented a neural network framework from scratch, including forward and backward propagation, various activation functions, and optimization algorithms, to enhance understanding of neural network mechanics and gain practical implementation experience.
  Tools: Python, NumPy, Matplotlib.
- **Face mood recognition**
  Developed a facial emotion recognition system using TensorFlow. Preprocessed a dataset of facial images with annotated emotions. Built and trained a convolutional neural network (CNN) to extract features and classify emotions, leveraging transfer learning and fine-tuning techniques for improved accuracy.
  Tools: Python, TensorFlow, Matplotlib, NumPy.
- **Flood Prediction Competition on Kaggle**
  I participated in the Flood Prediction Competition on Kaggle, applying machine learning techniques to

predict the probability of flooding using historical weather data, terrain features, and other factors. I utilized data exploration, cleaning, and feature engineering to extract meaningful insights and enhance model performance. This experience honed my skills in working with real-world data, applying advanced machine learning techniques, and contributing to a critical societal issue - flood prediction.
Tools: Python, Seaborn, Matplotlib, Scikit-learn, XGBoost .

- **Titanic Competition on Kaggle**
  Participated in the Kaggle Titanic competition, applying machine learning techniques to predict passenger survival based on various features, enhancing skills in data analysis, feature engineering, model selection, and evaluation.
  Tools: Python, Matplotlib, Pandas, Seaborn, Scikit-learn.
- **Yolo-based dog breed detection and classification system**
  In this project, I have developed a system to classify and detect dog breeds in images. Using the YOLO model for dog detection, I have implemented data preprocessing, augmentation, and visualization techniques. The project involves filtering, resizing images, and bounding boxes, as well as preparing data for training models. The workflow is documented, including scripts for data handling and model training. This provides a comprehensive solution for dog breed recognition and detection.
  Tools: Python, Pandas, OpenCV, Ultralytics, Albumentations, Matplotlib, PIL, TensorFlow, PyTorch.
- **Steel Plate Defect Competition on Kaggle**
  Developed a practical solution for steel plate defect detection as part of the Kaggle competition, building and optimizing models to accurately identify and classify defects.
  Tools: Python, Matplotlib, Pandas, Seaborn, Scikit-learn, XGBoost.

Work Experience

Internship at SoftClub 24 Jun 2024 - 7 Jul 2024

During my internship at SoftClub, I developed a project focused on detecting dogs in images and videos. This project involved using machine learning techniques and image processing to accurately identify and classify dogs in various images and video footage.

Education

Belarusian State University Minsk
Bachelor of Computer Science 2023 - 2027

Language Skills

Russian Native
English B1

Personal Strengths

- Responsible
- Reliable
- Result oriented
- Rapid learning
- Disciplined
- Stress-resistant