

Victoria Artiushkina Machine Learning Engineer Barcelona, Spain

github.com/vic-art

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SKILLS

Machine Learning PyTorch Transformers TensorFlow/Keras NumPy OpenCV Pandas Scikit-Learn Matplotlib

Software Eng.

Seaborn / Plotly

Python
PostgreSQL/MySQL
NoSQL (MongoDB)
Linux
Docker

AWS (EC2, S3) Git

JS / HTML / CSS C#

Web Scraping

BeautifulSoup Scrapy Selenium

Analytics

Tableau
PowerBI
Firebase
Google Optimize
A/B Testing

WORK PERMIT

Spain (EU)

WORK EXPERIENCE

Mains Lab | Machine Learning Engineer | Al for Insurance Industry Sep 2021 - Present

- Participated in development of AI-driven SaaS products for insurance companies:
- Developed VIN number recognition module for processing of photos of car registration documents, using ViT-based text ROI detector and Google Cloud Vision OCR.
- Search engine module for detection of variations in name and address of the same organization in medical bills (HuggingFace Transformers). I was engaged in building of Transformer-based models for recognizing organization names from unstructured texts of medical bills Named Entity Recognition (NER). The deployment of the model to production allowed to process 78% of medical bills without human involvement.
- Automated categorization and routing of inquiries of policy holders to Support department of an insurance company with BERT-based text classification models.
- Data preparation, including extraction from SQL databases and files, data cleaning and consolidation, dataset creation and curation. Visualization of complex data and analytical results using Tableau and Python's visualization libraries (Matplotlib, Seaborn, Plotly).

Sumitomo Mitsui Banking Corporation | Analyst | Credit Risk Management Apr 2019 - Aug 2021

- As one of the key developers of the Expected Credit Loss model, I played a crucial role in the project that saved the Bank over \$200,000, without the need to hire an external consulting company.
- Improved the methodology of Bank's portfolio stress testing.
- Prepared and successfully held regular presentations on Bank's credit portfolio dynamics for the Management meetings.

Sumitomo Mitsui Banking Corporation | Analyst | Credit Analysis Apr 2019 - Aug 2021

- Added a VBA macros to the credit application template that allowed to reduce the average time for preparing a credit application by all credit analysts by approximately 10%.
- Prepared a number of of credit applications, analytical materials for the Bank's management and industry researches. Participated in meeting and calls with clients and Bank's global offices (London, Tokyo).

EDUCATION

2021 - 2022	Artificial Intelligence Engineer 1-Year Educational Program GeekBrains
2016 - 2018	Financial Analytics Master's Degree GPA 8.5/10 Higher School of Economics
2012 - 2016	Economics Bachelor's Degree GPA 4.9/5.0

Plekhanov Russian University of Economics

Tableau A-Z, ZTM

PERSONAL PROJECTS

Image Classification | FoodVision Mini & FoodVision Big

Created 2 models for food classification from a given image using pretrained EffNet-B2 model. The first model was trained on a subset of Food-101 dataset to classify 3 classes of food and the second one - on the entire dataset, in order to identify 101 classes of food. Both models were deployed with Gradio (please refer to *huggingface.co/vic-art*).

Research Paper Replication | Original ViT Paper

The Vision Transformer model architecture was replicated from scratch, according to the original paper "An Image is Worth 16x16 Words: Transformers for Image Recognition at Scale" (arxiv.org/abs/2010.11929).

Text Classification | Fake News Detection

FakeNews dataset was analyzed and pre-processed. Text classification models were built using 'bag-of-words', TF-IDF embeddings with Naive Bayes, Logistic Regression and SVC classifiers; BERT-based classifier with HuggingFace Transformers library.

Predictive Modeling | Next Customer's Order Prediction

Conducted a comprehensive EDA, extracted features from the available data (feature engineering). Solving a binary classification problem (for each user-product pair), built several models including Logistic Regression, Random Forest and Gradient Boosting.

Telegram Bot I Phonebook App

A phone book was created with the function of viewing, adding new contacts, searching for a phone number by name, deleting a contact, importing and exporting data in several formats (CSV, JSON). The interaction with the phonebook is organized via Telegram bot.

COURSES & BOOKS

Python for Machine Learning & Data Science, Udemy

Data Structures & Algorithms, ZTM

PyTorch for Deep Learning, Udemy **Python Bootcamp,** Udemy

TensorFlow & Keras, Deep learning with Python by Francois Chollet SQL Bootcamp, Udemy

NLP with Transformers,

Building Language Applications with HuggingFace by Lewis Tunstall

VOLUNTEER EXPERIENCE

Junior Achievement Worldwide | Nonprofit Organization "More Than Money" Charity Program
Held financial literacy cources for the class of 30 junior school students.

LANGUAGES

English (professional working proficiency), **Spanish** (limited working proficiency), **German** (basic), **Russian** (native)

^{*} For a full list of projects please refer to my GitHub profile: github.com/vic-art