



# ILLYA TYKHONOV

Data Scientist

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Tbilisi, Georgia

github.com/tixonsit

## EXPERIENCE

### Product owner

Polymatica, Softline

Dec 2023 - Jan 2026

Tbilisi, Georgia, half-time

- Audit, support and development of an existing ML solution for tabular data within the management of analytics and development teams.
- Interaction with clients: from the presale to the deployment of the system in the client's contour.
- Market analysis, development of a course and a product improvement plan in the field of deep learning.

### Chief technical officer

Neuro Metrix

Aug 2022 - Aug 2025

Batumi, Georgia, full-time

- Development of a full cycle of video analytics tasks for retail: user data collection, markup quality assessment, model training, deployment. Creation of detection and tracking pipelines. Developing an API for asynchronous recognition based on Triton library.
- End-to-end, training, deployment and maintaining of a neural network cascade detection system for video analytics tasks in retail. Development, training and deployment of a system for determining the direction of view for the task of e-commerce.
- Team Management and technical interviews conduction.

### Chief technical officer

Neuro Wood

Feb 2022 - Aug 2022

Istanbul, Turkey, part-time

- Development of a full cycle system related to forest industry tasks: creation of timber detection, breed classification and depth estimation pipelines from markup to deployment for logging measurements automation.
- Team Management and technical interviews conduction.

### Data Scientist

Agroinvest companies group

Jul 2021 - Nov 2021

Moscow, Russia, part-time

- Identification of the most effective routes of movement of equipment using reinforcement learning.
- Table OCR system development for purchase automatization.
- Neural entity recognition, clustering and classification for document automation.

## SKILLS

Python Numpy Pandas Matplotlib  
 CV2 PyTorch Lightning spaCy  
 NLTK Transformers Docker Triton  
 Git

## SOFT SKILLS

Project Mgmt Teamwork Leadership  
 Communication Creativity

## EDUCATION

### PhD Cybernetics & Radio Engineering

MIPT – Moscow Institute of Physics and Technology

2020 - 2024

Moscow, Russia

### Master's Cybernetics & Radio Engineering

MIPT – Moscow Institute of Physics and Technology

2018 - 2020

Moscow, Russia

### Bachelor's Cybernetics & Radio Engineering

MIPT – Moscow Institute of Physics and Technology

2014 - 2018

Moscow, Russia

## ARTICLES

- Тихонов И.В. и соавт. Синтез панорамного видео высокого разрешения и детекция объектов на панорамном видео. IRASET, 2024.
- Тихонов И.В. и соавт. Два подхода муравьиной оптимизации для поиска путей в сортировочном центре. IRASET, 2024.
- Тихонов И.В., Жданов А.А. Адаптивный алгоритм трекинга в задачах реального времени. Нейроинформатика-2022, стр. 315-324.

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## Lecturer

### Educational and Methodological Laboratory of Innovation of the FPMI, MIPT

📅 Oct 2020 – Aug 2023

📍 Moscow, Russia, full-time

- Designed educational materials and delivered lectures and seminars on data analysis, machine learning, and deep learning.
- Delivered 40 full courses (16+ hours each) for 2,000+ graduates across B2B and B2C audiences, including Sber, Gazprombank, and VK.
- Recorded 3 offline courses focused on machine learning and deep learning.
- Designed curricula for technical schools and colleges, introducing a standardized Data Analyst program structure, including a full bachelor-level track beyond ML-only topics.

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## Data Scientist

### Intellect LLC

📅 Dec 2017 – Oct 2020

📍 Moscow, Russia, full-time

- Prediction of glaze production at the enterprise based on historical data, creation of a visualization interface.
- Development of solutions for thematic modeling for document processing.
- Development of clustering methodology using Kohonen networks for unsupervised clustering.
- Generation of training data for quadcopters controlling in a simulation.

- Тихонов И.В., Жданов А.А. Алгоритм извлечения знаний в системах технического зрения для задач реального времени. Нейроинформатика-2021.

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## PATENTS

- Kazakhstan, №39401 Determining the direction of the user's gaze on the device screen, taking into account dynamic movement (shaking)
- Russia, №2019616027, Committee of self-organizing neural networks
- Russia, №2018663630, Modular program of universal multilevel autonomous adaptive management (AAU) of business processes