

# ALEKSEI SHABANOV

## Machine learning engineer

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alekseysh

Moscow, Russia

I am a machine learning engineer who strives to find balance between complex research and quality code.

## WORK EXPERIENCE

### Machine learning engineer

#### Neuromation Inc.

March 2018 – October 2020

Saint-Petersburg, Russia

Working in a start-up allowed me to broaden my horizons and realize projects in machine learning consulting, for example:

- Built a **computer vision** system which was able to save doctors' time by checking if a box with surgical tools was correctly completed. This was a challenge because there were a lot of diverse tools and we had to solve the problem without retraining the model (in a few-shot way), [link](#).
- Created a **text** processing tool to extract useful information from emails. It required to fulfill a project from communicating with the client and setting up the data labeling process to containerization and deploying the trained model.

### Junior data analyst

#### 3Red Trading, LLC

June 2016 – March 2017

Saint-Petersburg, Russia

The company analyzed billions of transactions from the Chicago Mercantile Exchange. Based on statistical anomalies, I recognized traders who used automatic tools, which allowed our team to predict their behavior. I also learned how to make reports with a large number of graphs as clear as possible.

## SIDE PROJECTS

### Catalyst

#### In top-10 contributors by code amount

Catalyst is a popular **open-source** analogue of Keras for PyTorch (2.3k stars on GitHub, part of PyTorch ecosystem). Among other things, I have implemented and tested a metric learning module for obtaining the representations of objects.

[Medium post](#) [en]. [Video from Data Fest](#) [en].

### Uber Movement Challenge

#### 2nd place (out of 100+ teams)

11 Oct 2019 – 10 Feb 2020

This was a tabular competition with the following task: "*Predict when and where road incidents will occur next in Cape Town*". We achieved good results due to non-standard feature engineering for spatial data and a neat validation pipeline.

[GitHub](#). [Video from Data Fest](#) [ru].

### JetBrains seminars at Computer Science Center

#### Gave a lecture about Person Re-Id task

[Video](#) [ru].

## SKILLS AND ABILITIES

nlp	cv	tabular analysis	Re-Id
segmentation	tracking	metric learning	
Python	PyTorch	OpenCV	NumPy
pandas	sklearn	CatBoost	Jupyter
Linux	git	CI/CD	docker
SQL (basic)	MATLAB	LaTeX	

## EDUCATION

### MSc in Applied Mathematics and Physics

#### Saint-Petersburg State University

2016 – 2019

Thesis title: "Semi-automatic cataloguing of images in a social network using machine learning methods".

### BSc in Physics

#### Saint-Petersburg State University

2012 – 2016

Thesis title "Statistical methods for the separating of interfering seismic waves".

## COURSES

- Introduction to databases, [certificate](#).
- Functional programming in Haskell, [certificate](#).
- Graph theory, [certificate](#).

## LANGUAGES

- English — Upper-Intermediate (B2)
- Russian — Native speaker