

# Yulia Yakovleva

## Software engineer

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Netherlands  
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🔗 robolamp  
in Yulia Yakovleva

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## Experience

- November 2022 – **Machine learning engineer**, *Stability.ai*, Amsterdam
- Now I worked on the following projects:
- Stable-Finetuning (Python, PyTorch, CUDA, diffusion models, HPC):
  - Stability models API.
  - LLM-related effort.
- March 2022 – **Machine learning engineer**, *Rainbow.ai*, Warsaw
- September 2022 ○ I worked on applying deep learning models for weather forecasting (Python, PyTorch, Weather RADAR data).
- November 2021 – **Machine learning engineer**, *Descriptor.ai*, Remote/Moscow
- February 2022 ○ I created a few good-performing voice sentiment analysis models (Python, NumPy, TensorFlow, Keras, Audio data).
- July 2021 – **Machine learning engineer**, *MediaZona*, Remote/Moscow
- October 2021 ○ AI Text Generation (NLP, Python, NumPy, TensorFlow, Keras, Transformers, GPT): I worked on conditional text generation with neural networks. My responsibilities included both engineering/coding and interaction with non-tech employees of MediaZona on translating their non-tech requirements into "tech language", finding the data and getting a feedback on text generators' work.
- March 2018 – **Software engineer**, *Yandex Self-Driving Cars*, Moscow
- May 2021 ○ Sensor diagnostics software (ROS, C++, Python, NumPy): I created data quality checking software modules for cameras and LiDARs.
- Traffic lights recognition software (ROS, C++, Python, NumPy, TensorFlow, Keras).
- I worked on improvement of traffic lights recognition and tracking pipeline,
  - learning data mining, pre-processing and datasets preparation,
  - created, learned and deployed multiple iterations of deep neural networks, which are working now on hundreds of self-driving cars made by Yandex.

- October 2015 – **Robotics researcher/developer**, *Institute for Information Transmission Problems RAS (Kharkevich Institute)*, Moscow  
August 2017 I worked on self-driving car prototype positioning and control software including: system launch tool to replace ROSLaunch, positioning and control systems (C++, Python, ROS, Eigen, Computer Vision, Kalman filters).
- June 2015 – **Junior web-developer**, *WETA Group*, Remote  
October 2015 Full-stack web-development
- July 2013 – **Junior control systems developer**, *Modern Signal Processing and Control Technologies R&D Laboratory*, Chelyabinsk  
June 2015

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## Patents

- 2020 **Method of and system for determining traffic signal state**  
Artamonov, Kalyuzhny, Yakovleva  
○ US Patent US20210201058A1, application at 2020.09.28, pending.  
○ European Patent EP3842996A1, application at 2020.10.14, pending.

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## Talks

- 2019 **Myths about Self-Driving Cars**, *Presented at WTM Moscow*  
2019 **Traffic Lights in Yandex Self-Driving Cars**, *Presented at Yandex Self-Driving Meetup 2019, PyLadies Moscow and PyLadies Kazan*  
2020 **Data mining in Yandex Self-Driving Cars**, *Presented at Pytup Moscow*

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## Education

- 2010–2015 **National Research South Ural State University**;  
Computer Technologies, Control and Radio Electronics Faculty;  
Automation and Control Department;  
MEng with honours.
- 2015–2017 **Moscow Institute of Physics and Technology (State University)**;  
Department of Innovation and High Technologies;  
Cognitive technologies sub-faculty;  
MSc in Computer Science.

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## Volunteering

- May 2020 – now **Web developer/data analyst**, *OVD-Info*, Remote/Moscow  
OVD-Info is an independent human rights media project. I'm participating in development of information collection and analysis system for OVD-Info using SQL, Python and Django.

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## Skills

Main:

C++ (Eigen), Python (Jupyter, NumPy, Keras, Sklearn), Git, ROS, Linux, Machine Learning, Computer Vision.

Experience with:

Bash, C, OpenCV, JS (some outdated frameworks), Django, Docker, L<sup>A</sup>T<sub>E</sub>X, Dynamic systems math modelling, Matlab/Simulink.

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## Languages

Russian Native speaker

English Fluent

German Beginner

Tatar Beginner

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## Pet projects

**rTerm**, [github.com/robolamp/rTerm](https://github.com/robolamp/rTerm)

Fake JS-based UNIX term for my personal page.

**Random three body problem bot**, [github.com/robolamp/3\\_body\\_problem\\_bot](https://github.com/robolamp/3_body_problem_bot)

A program which is simulating the behavior of random three body system multiple times and publishing animation of the most interesting one every 12 hours at Telegram channel.