



# Nikolay Zinov

CV

## Education

- 2018–present **MS**, *Moscow Institute of Physics and Technology*, Data Science program with Yandex.
- 2014–2018 **BS**, *Moscow Institute of Physics and Technology*, GPA: 8.8/10, Major in CS.
- grad. 2014 **High School**, *Moscow School 57*.

## Skills

- |            |   |            |                                      |
|------------|---|------------|--------------------------------------|
| category 1 | Algorithms and data-structures in C++ and Python  | category 2 | Machine learning and neural networks |
| category 3 | Full-stack web (HTML, CSS, JavaScript, Django). Minor exp. with Tornado, Angular, Ionic | category 4 | Linux administration + Docker        |
| category 5 | Math and physics background   |            |                                      |

## Languages

- Russian **native**
- English **good written and spoken**

## Experience

### Employment

- 2018–present **Middle software developer**, *dialog systems («Alice» personal assistant)*.  
Responsibilities include improving and experimenting with deep learning models for general conversation (small talk) feature of Alice personal assistant.

### Projects

- 2018 **AI accompanist**, *technical lead in a group project*.  
Using machine learning to compose and perform accompaniment for live performance, adapting to the soloist in real time
- 2017–2018 **Threat detection in X-ray security imagery**, *group project*.  
Commercial solution to detect dangerous objects in luggage. State-of-the-art object detection networks are fine-tuned for X-ray imagery.

- 2017 **Dolphin signals study**, *group project for Institute of Oceanology (SIO) RAS.*  
Using machine learning (neural networks) to cluster pulse-tonal signals of bottlenose dolphins  
- article pending.
- 2017 **Yes And No Puzzle Telegram Bot**, *group project.*  
[https://telegram.me/yes\\_no\\_puzzle\\_bot](https://telegram.me/yes_no_puzzle_bot) — Telegram bot that can answer yes-or-no questions on some situation using crowd-sourcing and similarity search
- 2016 **Ray-tracing renderer in C++**, *as a term assignment.*  
<https://github.com/nzinov/ray-tracer> — 3D scene rendering from STL and customary format files
- 2014 **"Phystech sea battle" web game.**  
<https://github.com/nzinov/phystech-seabattle> — using Django + Tornado for WebSockets
- 2013 **"The Hat" game statistics server**, *group project in summer school.*  
<https://github.com/parallel-p/thehat> — using statistics gathered from players to enhance word recommendations and provide data for linguistic studies
- Minor projects and participation in open-source.**  
See my GitHub account: <https://github.com/nzinov>

### Hackathons

- Fall 2017 **HackUPC**, *Doist's challenge winners.*  
Integration for Twist messaging app, that detects when there are multiple conversations going in one channel and proposes to move users involved in one of those to a new thread automatically
- 2017 **HackZurich**, *Thomas Reuters' workshop.*  
ML-backed solution to augment news stories with relevant photos of recent events (disasters, sports, accidents) from common people on social media.

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### Hobbies

- 1 Music (violin player)
- 2 3D-printing and DIY
- 3 Mountain hiking