



Nikolay Zinov

CV

Education

2014–present **BS**, *Moscow Institute of Physics and Technology*, GPA: 8.8/10, Major in CS.
grad. 2014 **High School**, *Moscow School 57*.

Skills

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|------------|---|------------|--------------------------------------|
| 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 **Software engineering intern**, *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 — 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.

Hobbies

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