

# Gleb Posobin

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posobin.com

## *Education*

2018–now PhD, Theoretical Computer Science, Columbia university  
Currently working on information theory, data structure lower bounds.

2014–2018 B.Sc., Computer Science, Higher School of Economics  
First in the cumulative rating of senior students.

2014–2016 Independent University of Moscow [ium.mccme.ru/english](http://ium.mccme.ru/english)  
This is an institution where advanced math courses are taught. I have finished the first year and listened to several second-year courses, such as complex analysis and differential geometry.

## *Work experience*

2016–2018 Research assistant at the laboratory of theoretical computer science, Higher School of Economics

2017 Summer research internship at EPFL, Switzerland [ic.epfl.ch/SummerAtEPFL](http://ic.epfl.ch/SummerAtEPFL)  
Worked for two and a half months on a project in information theory.

2017–2018 Machine learning researcher at Prisma labs [prismalabs.ai](http://prismalabs.ai)  
Worked on various deep learning research projects, such as image generation with GANs, improvements to classical image style transfer, and scene recognition.

## *Projects*

2012 Unofficial last.fm client for windows phone [github.com/passick/wp\\_fm](https://github.com/passick/wp_fm)

2013 Wordament solver [github.com/passick/wordament-solver](https://github.com/passick/wordament-solver)  
Small app that solves wordament game from the live web-camera stream with phone's screen with the game in it.

2015 Convolutional neural networks in C++ [github.com/cs-hse-projects/artificial-neural-network](https://github.com/cs-hse-projects/artificial-neural-network)  
A custom framework for creating and using convolutional neural nets in C++ on CPU, takes advantage of multithreading.

2015 xv6 [github.com/passick/xv6](https://github.com/passick/xv6)  
Extended Unix-like educational OS xv6 to support multithreading, added kernel memory allocator, users and various smaller features.

2018 Gifgif [github.com/passick/gifgif](https://github.com/passick/gifgif) [posobin.com/gifgif](http://posobin.com/gifgif)  
An app for users to add gifs on top of youtube videos. I came up with the idea, designed the app and implemented the frontend. Done as a final project for the user interface design class I took.

## *Achievements*

- 2015, 2016* Prize winner at the International Mathematical Competition for university students imc-math.org.uk  
Won third prize in 2015 and second prize in 2016.
- 2016, 2017* Double recipient of Ilya Segalovich scholarship  
Ilya Segalovich scholarship is merit-based and awarded yearly to the students of computer science department at Higher School of Economics by Yandex.

## *Papers*

- 2018* Random noise increases Kolmogorov complexity and Hausdorff dimension arxiv.org/abs/1808.04626  
Gleb Posobin, Alexander Shen To be presented at STACS 2019
- 2016–2017* Computing majority with low-fan-in majority queries arxiv.org/abs/1711.10176  
Gleb Posobin
- 2017* Plain stopping time and conditional complexities revisited arxiv.org/abs/1708.08100  
Mikhail Andreev, Gleb Posobin, Alexander Shen Presented at MFCS 2018

## *Technical experience*

- languages* C++, Python — fair working knowledge  
C#, Ruby — used in the past  
Bash, ML, Racket, F#, assembly, JavaScript — basic knowledge
- technologies* Pytorch, linux — using every day  
HTML, CSS, TensorFlow, Torch, SQL, React — basic knowledge