

# Boris Starkov

[boris.starkow@gmail.com](mailto:boris.starkow@gmail.com) | +7 (999) 535 2775 | [github.com/pennyroyaltea](https://github.com/pennyroyaltea)

## Education

Saint-Petersburg State University

2018-2022, St. Petersburg, Russia

*Undergraduate at the Department of Mathematics and Computer Science*

Excellent marks in **Algorithms & Data Structures, C++, Discrete Math, Functional Programming, Formal Logic & more**

Physical-Technical High School

2014-2018, St. Petersburg, Russia

*Honor student*

In-depth study of maths, physics, computer science and english

Successfully participated in national school contests in **Competitive Programming** and **Maths**

Illinois Math & Science Academy

2017, Aurora, Illinois, USA

*Exchange student*

Worked on school projects in a multicultural international team, dramatically improved **communication & collaboration skills**

## Experience

Yandex LLC.

2021, St. Petersburg, Russia

*Data Scientist Intern / Junior at Antifraud team*

Mined new features for detecting fraud using CatBoost. Embedded the features in existing production pipelines.

Skills improved: **Statistics, Applied ML, CatBoost, Feature Selection, SQL**

ASTRAL AI

2020, St. Petersburg, Russia

*Deep Learning Research Intern*

Applied game theory to deep learning models to retrieve information about noisy/bad-labeled points in a train dataset.

Skills improved: **Python for DL, Discrete Maths, Data Science, Docker**

Yandex LLC.

2019, Moscow, Russia

*C++ Backend developer Intern at News team*

Refactored existing news delivery algorithm — made it distributed, effective and fault-tolerant, which improved interaction experience for both internal consumers and news websites

Skills improved: **C++17, Software Design Patterns, Microservices, Web, Concurrent Programming, Data Structures**

## Projects

Training app for hearing-impaired people

[Github repo](#)

Created an app that helps people to train and test their hearing skills. It is used in the biggest hearing clinic of Saint-Petersburg with 100+ training sessions weekly. It is patented, also it is used in several medical research papers.

Skills improved: **Javascript, React, NodeJS, Electron**

Serverless sudoku solver

[Github repo](#)

Developed from scratch a program that runs on amazon lambda and is capable of solving sudoku of any difficulty using the SAT solving library. It has a REST api and an interface for telegram bot.

Skills improved: **Python, Serverless, REST API, Unit Testing, Discrete Maths**

Gradcam + imagenette experiment

[Google colab](#)

Applied resnet18 model to classify images from imagenette dataset. Used gradcam to visualize most important zones and figure out why the model underperformed on some objects.

Skills improved: **Deep learning, Computer Vision, Scientific Python**

## Skills & Achievements

- Great knowledge of **algorithms** and **data structures** resulting in high **competitive programming** results — top-50% on final round of Russian national informatics contest, highest rating of 2091 over 75 different contests on Codeforces, 16th place out of 120 teams in the North-Western Russia Regional ACM ICPC
- Ability to efficiently **collaborate in a team** — from both **team competitive programming** contests and **team university projects**. Experience of working in several **diverse international teams** on different projects. Experience of **volunteering** as an algorithms teacher in summer camps for teenagers, with several of my students becoming winners of national olympiad in informatics
- Ability to write and read code in many languages including **C++, Java / Kotlin, JS, Python, Go, Haskell**. Knowledge of modern design patterns in both **OOP** and **Functional** paradigms
- Profound knowledge of **Advanced Maths**, including **Probability Theory, Discrete Maths, Computational Complexity Theory, Game Theory** and more. Ability to quickly understand new concepts