# Valery Cherepanov

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### **EDUCATION**

### SYNERGY UNIVERSITY

**BACHELOR OF COMPUTER SCIENCE** 2017-Present | GPA: 4.5/5

### **SAINT PETERSBURG** ACADEMIC UNIVERSITY

BACHELOR OF COMPUTER SCIENCE 2015-2017 | GPA: 4.3/5

### SKILLS

#### **LANGUAGES**

Over 10000 lines:

Python • C++ • Kotlin

Over 5000 lines:

Go • Java • ATEX

Over 1000 lines:

C • Haskell • JavaScript • Lua • SQL

Protocol Buffers

Familiar with many others

#### **ALGORITHMS**

Excellent theory knowledge. Implemented **PRIVATE TUTOR** October 2016 - Present dozens of algorithms and data structures from basic (e.g. Dijkstra, Hash table) to advanced (e.g. Boruvka, Link/cut tree) ones.

#### **MACHINE LEARNING**

Solid theory knowledge and experience with Python tools.

### **ADDITIONAL**

Linux • Version control • Vim • testing Google-fu • databases • cryptography design patterns • Jetbrains IDEs • math functional programming • refactoring

### LINKS

Github:// qumeric Codeforces:// qumeric StackOverflow:// qumeric

## **FUN FACT**

Created my first game being 11 years old:) AWARDS

### **EXPERIENCE**

### **GOOGLE** | SOFTWARE ENGINEERING INTERN

April 2018 - September 2018 | London

Worked on shipped Gradle Sync in Android Studio.

- Reduced new project creation time approximately tenfold.
- Created better protobuf-based caching mechanisms.
- Worked on code-quality related issues.
- Created mechanisms for sharing Sync in VCS.
- Investigated and fixed Android Studio's offline repository.

### **GOOGLE** | SITE RELIABILITY ENGINEERING INTERN

June 2017 - October 2017 | Zürich

Worked on provenance tracking for System Modeling and Actuation. Project contained two parts: research and implementation.

- Created abstract provenance model based on interactions in existing Google production stack from Piper to Borg.
- Received positive feedback from one of the top researches in the field.
- Implemented proof-of-concept log postprocessor (which aggregates provenance data from existing logs).
- Designed protobuf representation of provenance data and added sufficient provenance logging to three existing systems.
- Learned Go along the way:)

- Provided one-on-one instruction to students of different age and background.
- Topics: C++, Python, competitive programming, middle school math.

### SELECTED PROJECTS

#### **INSTABATTLE** Android app with backend

A game/application where users strive to take the best photo in certain location from the map. Mostly worked on the backend in Flask, on topics such as:

- Databases (SQLAlchemy + PostgreSQL)
- · Authentication and Authorization
- Rich RESTful API

#### **CELL CLASSIFIER** University research work

Designed and coded a classifier of cells under influence of a drug Paclitaxel using image segmentation techniques and recurrent neural network. Implemented blazingly fast learning on GPU (CUDA) and achieved 90% classification accuracy.

### TSP SOLVER University algorithms project

Implemented seven different algorithms for Traveling Salesman Problem in C++ and provided quality/speed analysis. Also optimized hyperparameters using genetic algorithms.

2018	Top 4% active users	Codeforces
2015	3 <sup>rd</sup> /262	Moscow Info

Moscow Informatics Olympiad 2015 Prizewinner Several programming competitions

2014 3<sup>rd</sup>/55 (teams) Moscow CTF School