# Roman Vsemirnov

Germany | +49 176 29784420 | vsemirnov.roman@gmail.com | t.me/roman\_globalnij | linkedin.com/in/roman-vsemirnov

#### EDUCATION

Constructor University

Bachelor of Computer Science

Bremen, Germany

February 2023 – June 2023

**Higher School of Economics** 

Bachelor of Applied Mathematics and Computer Science GPA 7.33/10.0

St.Petersburg, Russia August 2020 – January 2023

## Relevant Courses:

- Programming: Machine learning, Databases, Algorithms and Data Structures, C++/C, Java, Python
- Math: Mathematical statistics, Calculus & Analysis, Numerical methods, Linear Algebra, Graph theory

# Technical Skills

Languages: C++(17), C, Python, Java, Bash

Developer Tools: Git, Vim, QT, Android Studio, Terminal (Linux), SQL

## EXPERIENCE

# USI Lugano Internship

Lugano, Switzerland July 2023 – September 2023

Java, Researcher • Figure out Apache Storm distributed system and Partially homomorphic encription

- Implement new encription system in Apache storm
- Test the effectiveness of the proposed coding method
- Solving problems with ciphertext extension, optimizing the solution

# Yandex Software Engineer | DRM developing OTT Team

Remote

Python, C Developer

October 2022 - January 2023

- Research of x264 codec parameters in order to improve video quality
- Sorted out the graph launch system and implemented it into the code
- Fixed bugs and improved team's internal service
- Replenished the database of analyzed videos for further research

## Yandex Internship | DRM developing OTT Team

Python, C Developer

St.Petersburg, Russia July 2022 – October 2022

- Backend developer of internal video file processing systems.
- Figured out the large code base of the service and many in-company utilities.
- Doubled the number of available metrics and speed up work by 20-25%
- Research of metrics behaviour on various video compression.

# Projects

# Thesis: Machine Learning for video compression improvement | Python, C

February 2023 - Present

- Exploring the area and already existing solutions
- analysis and selection of x264 parameters
- Creating a dataset and searching for features
- Building a Model and Analyzing Results

#### Kinetica | Java, Kotlin

January 2022 – June 2022

- Android application for tracking medicines
- Developed UI with Android Studio
- Implemented a graph framework

## Olympiads and other achievement

JetBrains study scholarship | in Constructor University

JetBrains personal scholarship | For excellent academic performance

All - Russian school olympiads at math | Winner, medalist

February 2023 - June 2023 September 2020 - December 2021 October 2019 - April 2020