

# Sergei Chudov

## Senior Software Engineer

## Introduction

I'm a software engineer with 5 years of experience. Now I am in Yerevan and ready for relocation or remote job.

Currently I am learning new technologies, upgrade my knowledge in software development and learning English.

## Contact Information

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## Work Experience

### Senior Software Engineer

*Bostongene*, Yerevan, Armenia - (Jun 2022 - Present)

- I participate in creating internal projects to optimize the work of internal customers. I am responsible for the stability of services running in Kubernetes.
- Achievements:
  - Saved one of the key databases by writing a script `netfs_unlker`. This action preserved 2 weeks of work for the teams working with these databases.
  - Participated in gathering requirements and designing the architecture, as well as the subsequent development of this service to facilitate policy annotation billing.
  - Implemented best practices in our team's development process, including tests, linters, and formatters, which helped increase our productivity.
  - Deployed and maintained multiple production services in a Kubernetes environment, including Airflow, adapting to changing requirements and system loads.
  - In the shortest possible time (4 days), I developed a production library with tests and CI/CD, which included a small language for converting patient parameters and their relationships into a machine-readable format.
- Responsibilities:
  - Moving bioinformatics algorithms to production
  - Gathering client requirements and converting them into code
  - Maintaining the functionality and monitoring services in Kubernetes
  - Writing and supporting production Python packages
  - Implementing frontend, backend, and pipelines in existing and new projects
  - Writing Helm charts and setting up CI/CD (Concourse) for projects

- Stack:
  - Python (FastAPI, SQLAlchemy)
  - Linux
  - TypeScript (JavaScript, React, Redux)
  - Docker, Kubernetes, Helm, Concourse, gitlab ci
  - RabbitMQ, Redis, PostgreSQL, Neo4j, Apache Kafka
  - Software Design, Software Infrastructure, Software Systems Engineering, Software Development

## Middle Software Engineer

*USSC Ltd.*, Yekaterinburg, Russia - (Oct 2019 - Mar 2022)

- Participated in the development of a system for detecting and preventing information security incidents in industrial networks.
- Achievements:
  - Simplified the implementation of user authorization, which reduced the number of bugs in this functionality.
  - Rewrote the complex and frequently breaking master-master interaction functionality, and covered it with tests, significantly reducing bugs.
  - Developed a backup service for main databases Mysql, Postgres.
  - Implemented index rotation in Elasticsearch.
  - Implemented a tool for generating TypeScript clients based on OpenAPI specifications. This reduced memory usage for these clients and improved the readability of method signatures on the client side.
- Responsibilities:
  - Designed microservices in python
  - Optimized SQL in MySQL, PostgreSQL
  - Developed and supported of authorization
  - Wrote Docker images to build from source
  - Wrote unit and integration tests
  - Edited frontend when I didn't want to distract the frontend developers
- Stack:
  - Python (aiohttp, asyncio, FastAPI, Flask, SQLAlchemy)
  - Linux
  - Docker, Jenkins
  - Elasticsearch, Mysql, Postgres, RabbitMQ
  - TypeScript (Angular, Javascript)

## Trainee ML Engineer

*NPO Avtomatiki*, Yekaterinburg, Russia - (Mar 2019 - May 2019)

- Implemented prototype of system that allows you to identify people with high accuracy in real time, the data is created by a video camera.
- Responsibilities:
  - Trained additional parts of YOLOV3 model
  - Optimized of YOLOV3 performance on weak hardware
  - Selected a ML model for object recognition
- Stack:
  - Python, tensorflow, keras, sklearn, Multiprocessing on Python

## Skills

### Development

Python - FastAPI - aiohttp - Flask - Docker - Kubernetes - Concourse - Linux - asyncio - MySQL - PostgreSQL - Redis - RabbitMQ - Elasticsearch - Neo4j - Typescript - Angular - React - Kafka

## Contributions

- aio-pika
- ruff
- chat-langchain

## Pet-Projects

- starlette-responses-kit - extension containing custom responses for starlette.
- netfs\_unlker - netfs\_unlcker is a Rust library and command-line interface designed to provide unlock 'fcntl' shared locks in netapp's

## Languages

### Russian

Native speaker

### English

B1

## Education

### Ural State Technical University

(Bachelor of Science (Unfinished))

Sep 2015 - Oct 2017 Radiophysicist

(Bachelor of Engineering)

Oct 2017 - Jul 2020 Design and Technology of Electronic Facilities

### Coursera

Aug 2020 - Aug 2020 Algorithms, Part I

Aug 2021 - Sep 2021 Introduction to Machine Learning