Personal Information Moscow, Russia

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ABOUT ME

I am a student and aspiring developer. I have been programming for 4 years, during this time I have contributed to 44 repositories, made 921 commits, and written 176,729 lines of code. I teach Python, having trained over 30 students. Co-founder and developer at Ballkit. Previously a professional volleyball player.

EDUCATION

Central University — Mathematics and Computer Science, 2028 (1st year). Major: "Development". Track: "Computer Science Research".

Skills

 $\mathbf{Python:} \ \ \mathtt{FastAPI} \ , \ \mathtt{pydantic} \ , \ \mathtt{Flask} \ , \ \mathtt{SQLAlchemy} \ , \ \mathtt{faststream} \ , \ \mathtt{alembic} \ , \ \mathtt{pytest} \ .$ 

Databases: postgres, sqlite, redis, Yandex Object Storage.

Message brokers: RabbitMQ, Mosquitto.

Other technologies: SQL, Java, JavaScript, bash.

Dev tools: Docker, Podman, Make, CI/CD, Linux, Git

ACHIEVEMENTS

Reached the final (1) of the Russian Championship in sports programming, among 5000 participants. Developed a microservice architecture of 9 services for the web application aggregating sports events across Russia. And developed an algorithm for processing and validating annual government reports on sporting events. Tech stack: Kafka, React, RabbitMQ (FastStream), FastAPI, OAuth.

Winner of the "Science for Life" scientific-practical conference among 117 projects with a smart home system project for private and public educational institutions. Tech stack: Redis, Zigbee2MQTT, websockets, Go, Python, Flask, React.

Third Prize winner, MPGU Informatics Olympiad: "Applied Informatics"

CERTIFICATES

Yandex Lyceum. Entered the 2nd year of the Yandex Academy Lyceum in "Industrial Development" as an external student. Solved 236 problems, implemented and defended 3 projects, final scored 100/100. Graduated with a diploma with honors.

Personal Projects

SmartCab Smart home system for schools

September 2023 — May 2024

Developed design prototypes. Implemented them (1, 2) in React. Wrote a bot for system administration. Implemented interaction with 5 smart devices via the Zigbee protocol through Mosquitto broker, and 3 scenarios in the classroom. Tech: Python, Go, JavaScript, bash, Flask, sqlite, redis, postgres, JsSip.

Starship Text-based action game on Telegram

 $March\ 2023-April\ 2023$ 

Developed mechanics for online duels with real players in a Telegram bot. Also created a flexible message rendering engine using jinja2 templates to handle numerous scenario and environment texts. Tech: Python , Flask , alembic , python-telegram-bot , SQLAlchemy , jinja2 .

Corpse Game engine

 $November\ 2022-January\ 2023$ 

As part of a team, developed a fully functional modular game engine based on the ECS architecture. Also created a survival top-down shooter game set in a zombie apocalypse. Tech:  ${\tt Python}$ ,

Pygame, esper, pytmx, aseprite, Tiled.

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## Custom Development

Telegram Bots All source code publication approved

Summer 2024

- Developed a bot for administering and selling WireGuard keys by subscription. Implemented clear analytics for clients directly in the bot. Tech: Python, sqlite, python-telegram-bot.
- Bot for aggregating relevant messages from chats, channels, and groups by keywords. Tech: Python, theleton, redis.

Other Projects All source code publication approved

Summer 2024

- Parser for the Portuguese embassy with authorization (1), captcha solving (2), and branching form traversal (3). Created a Docker image for containerized parsing with selenium under Chromium. Configured pre-commit hooks for ruff linter and pyright static analyzer. Tech:

  Python, selenium, psycopg, SQLAlchemy, FastAPI.
- CLI tool for secure operations on Outline servers for thousands of clients. Tech: Python .

Interests

Formal Verification: I am taking the Software Foundations course. I have read the first volume and proved 250 theorems in Coq.

**Linux:** I use Arch with the Hyprland compositor. I have published my .dotfiles. I wrote my Neovim config and a color theme from scratch. I have written over 20 custom scripts.