





💭 danik-progger



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Education

Bachelor MIPT Applied Mathematics and Computer Science

2022 - 2026

## Skills

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Programming languages: [ Python, TypeScript, C++, SQL ];
       [[ Pytest, Pandas, Numpy, Matplotlib, FastAPI, SQLAlchemy ],
        [ Next.js, React Native, Astro, Jest ]];
Other:
       [ Linux, PostgreSQL, Jupyter Notebook, Docker, Figma ];
```

# Experience

### Own prohramming language (github of the project)

The project included:

- 1. Mathematical part: theory of regular languages, finite automata
- 2. Compiler design: scanner, lexer, parser
- 3. Implementation: Python, OOP, graph algorithms, cli development After this project, I understand how programming languages work under the hood, what compilers, interpreters and translators do

#### Basketball league database (github of the project)

The project included:

- 1. Database design: conceptual, logical and physical models
- 2. Certification: 3NF, CD-2, SCD-4
- 3. Working with the database: SQL queries, combining tables, functions, views, indexes, analyzing data from a Python database After this project, I can design a database, work with PostgreSQL DBMS, make queries to the database and optimize them

#### Ray Tracing (github of the project)

I have been programming a physically plausible rendering of light in C++ using the principles of OOP. The environment of objects, the reflectivity and transmittance of materials are taken into account. This helps to achieve a realistic image.