Ekaterina Ankudinova

Computer Science student at HSE. Seeking software development internships to apply C++/Python skills in complex systems. Strengths: algorithm optimization and low-level programming.

Education

2023–2028 BSc Computer Science and Data Analysis, *National Research University* (expected) *Higher School of Economics (HSE)*, Moscow.

- o Relevant coursework: Data Structures, Algorithms, Calculus, Linear Algebra
- o Minor: Teaching Mastery in the Digital Age

Experience

2020-Present **Programming & Mathematics Tutor**, *Self-employed*.

- o Teach Python and C++ to middle and high school students
- o Trained 8 prize winners and 2 winners of city mathematical Olympiads
 - All students passed their final exams with 4+ grades or 75+ points.
- o Developed personalized curriculum focusing on algorithmic thinking

June 2024–Mar Juniour Software Developer, ROSTECH Aviation factory, Moscow.

 $2025\,$ o Developed an initial version of testing software for aviation navigation systems

- Using C++Qt, OpenCV and Arduino.
- Created a sensor signal simulator using Arduino
- o Developed an initial version of visualization tools for flight data recorder analysis
 - Using PyQt, mathplotlib, NumPy, Pandas
 - Created a data visualization tool with anomaly analysis

September Data Annotation Specialist, DAFE MIPT Laboratory, Moscow.

2022 o Annotated computer vision datasets for machine learning models

- Using CVAT
- Labeled over 1500 images using instance segmentation method.

Technical Skills

Languages C++ (STL, Qt, OpenCV), Python (PyQt, asyncio)

Tools Git, Linux (Bash), Docker, LATEX, CMake

Concepts OOP, Multithreading, Algorithms

Mathematics Calculus, Linear Algebra, Discrete Math, Probability

Languages

Russian Native

English B2 (Upper-Intermediate, Technical Documentation)