



CURRICULUM VITAE

EDUCATION

Moscow State University, Dept. of Computational Mathematics and Cybernetics
Mathematics, system programming, M. Sc., 1997
Spoken languages: Russian (native), English (B2)

EMPLOYMENT — TEACHING

2020-present*CS teacher at Alferov Physical-Technical High School (PTHS)
Saint-Petersburg*

3 classes in high school (10-11 grade)
2-year beginners course in CS and logic (6-7 grade)
Special courses:

- Computational geometry
- Computational biology (based on rosalind.info)
- Olympiad programming
- Python as a second Programming Language

2009-2020*CS teacher at School 57
Moscow*

30 classes (about 400 students)

- CS in Math classes
- CS in Biology classes

Evening Math School (6-7 grades)
School admission test (oral examination, works verification)

2020-present*Course developer/problem setter at Yandex Education
Moscow*

Have developed two large CS course in Programming (7 and 9th grade)

- 28 hours course for 7 grade
- 24 hours course for 9th grade, about 500 programming tasks in total

Yandex Informatics Olympiad (6-11 grade, 0.5 million students in the last three years)
Beginners Programming courses (1-2 and 5-6 grade)

2018, 2019, 2021, 2022*Lecturer at Sirius summer school for gifted and talented kids
Sochi*

- Lectures/seminars on Olympiad algorithmic problems for “Sirius.Junior” programme
- Lectures/seminars for CS teachers all over Russia, 3 sessions 1.5 hours each.

2016-2019*CS teacher at School 179
Moscow*

1 class, 8-11 grades

2009-2010*CS teacher at School 1189
Moscow*

2 classes, 10 grade

RESEARCH AND DEVELOPMENT

1998-1999

*Researcher and developer at Keldysh Institute for Applied Mathematics
Moscow*

“Alife Model of Evolutionary Emergence of Purposeful Adaptive Behavior”

Supervisor: V.G.Redko

C++, Neural Networks / Machine Learning / Genetic Algorithms.

Some results available at arxiv: <https://arxiv.org/abs/cs/0110021>.

2000-2001

*System analyst at IT Department, Alfa-bank
Moscow*

2001-2006

*Developer, analyst at Finance department, Information Agency Reuters
Moscow*

TEACHING EXPERIENCE

Working in both Schools 57 and 179 I updated the CS teaching practice in 57 by introducing an automatic checking system. The system is still in operation today and is actively used.

Many new programming exercises have been added to the course as well as ~20 new test/exam materials.

The special programme in CS for the Biology classes in School 57 was designed and implemented.

Part of this programme is based on the bioinformatics project rosalind.info.

I've taught programming in three languages: Pascal, C++, Python and a couple of some special educational languages, developed at School 57 in the 90s.

For several years I participated in the Methodological Committee of the All-Russian Olympiads in Informatics in Moscow and proposed/prepared some problems for the first and second stage of this Olympiad.

Below is a brief description of some of the courses I have taught.

Python and algorithms

3 and 4 year courses and supplementary materials: lectures, seminars, assessments, exams. Based on my experience a book on Python was written (“Python reference guide with examples”, in Russian).

School 57, School 179, Alferov Physical-Technical school

Algorithms for beginners (C++)

Lectures on algorithms for 6-7 grade students: number theory, sorting, combinatorics, dynamic programming, graph theory, shortest paths with problems to be solved in C++.

Sirius summer school

Computational geometry course

Basic geometric primitives and convenient type structure for storing and processing them.

Programming of rotation of any convex polyhedron illuminated by a single point source.

Alferov Physical-Technical school

Python as a second language

Advanced course on Python for programmers. Quick introduction into Python language and

Alferov Physical-Technical school

HOBBIES

Hiking, bike travels, swimming, photography.