



## 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](http://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](http://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.