Vladimir Shadymov

Curriculum Vitae

Education

2016– Moscow Istitute of Physics and Technology (State University), Moscow 2020(expected) (Russia), Department of Molecular and Chemical Physics (B.Sc. at Applied Mathematics and Physics).

Learned subjects:

Mathematics: analytic geometry, linear algebra, differential and integral calculus, field theory, harmonic analysis

Physics: general physics (mechanics, thermodynamics and molecular physics, electrodynamics, optics), theoretical mechanics, chemical physics

Chemistry: inorganic chemistry, organic chemistry, analytical chemistry

Computer Science: algorithms and data structures Average grade: 9.3/10; ranking top-5% of the university

Education and Training

January 2018 Mathematics and Python for data analysis by Moscow Institute of Physics and Technology & Yandex on Coursera (Certificate)

Work experience

Tutor. Worked with gifted children as mathematics and physics teacher.

Achievements

2015, 2016 All-Russian Olympiad, Regional Stage. Prize-winner in Physics

2015, 2016 PhysTech Olympiad. Prize-winner in Physics and Mathematics

2015, 2016 All-Siberian Olympiad. Prize-winner in Physics

2015 All-Russian Olympiad, Regional Stage. Prize-winner in Chemistry

Interests

- Applied Physics (conducting experiments, processing experimental results)
- Algorithms and Data Structures

Scientific skills

Laboratory Basic physical methods. Basic routine chemical methods (solutions preparing, skills titration, pH measurement), photometric method of analysis

Computer skills

Python Scripting, data analysis (least-squares fitting, spline interpolation, numerical differentiation and integration) and visualisation. Worked with such packages as NumPy, SciPy, Matplotlib, Pandas, Bokeh. Familiar with Nosetests for Python.

C++ Worked with STL, Google Test framework. Familiar with .NET Framework. Developed programm (1k strings) for calculus in quaternions. For more details, see the repository: https://github.com/vladimirshadymov/quaternions.

Other Linux/Windows fluent user, extensive experience with Microsoft Office-like software. Worked with Git. Familiar with LATEX.

Languages

Russian Native Speaker English Intermediate German Elementary

Hobbies & Extra-curricular activities

Sports Swimming, volleyball, cycling

Team work Organized with co-students a point for holding the PhysTech olympiad in February 2017

Leadership Lead a group of campers in a week-long ski trip for 100km under the Arctic Circle in The Republic of Karelia, as a semi-final stage of competition "Reach the North Pole". (February 2016)