

# Lina KULAKOVA

## PERSONAL DATA

---

PLACE OF BIRTH: Nizhny Novgorod, Russia  
DATE OF BIRTH: 1 December 1990  
ADDRESS: Haldenstrasse 16, 8142 Uitikon Waldegg, Switzerland  
EMAIL: [kulakova.lina@gmail.com](mailto:kulakova.lina@gmail.com)

## EDUCATION

---

2013– <i>present</i>	<a href="#">ETH ZURICH</a> , Zurich PhD student Major: Mechanical Engineering Advisor: Prof. Dr. Petros KOUMOUTSAKOS
2008–2013	<a href="#">MOSCOW STATE UNIVERSITY</a> , Moscow Degree: Specialist <sup>1</sup> of Science in MATHEMATICS Major: Computational Mathematics Advisor: Kirill Yu. BOGACHEV Final Grade: 4.9/5 <a href="#">  Detailed List of Exams</a>
2007–2008	<a href="#">ADVANCED EDUCATIONAL AND SCIENTIFIC CENTER OF MOSCOW STATE UNIVERSITY</a> , Moscow Major: Mathematics and Physics Final Grade: 4.9/5
Aug 2006	SUMMER MATHEMATICS SCHOOL, Kostroma region, Russia

<sup>1</sup>Specialist is a Russian degree equivalent to Master

## INTERNSHIPS

---

2013	INTERNSHIP IN ETH ZURICH Worked on uncertainty quantification project
2013	INTERNSHIP IN TU WIEN Studied some C++ techniques needed for efficient algebraic computations
2012	<a href="#">GOOGLE SUMMER OF CODE</a> Open-source developer of « <a href="#">FLINT – Fast Library for Number Theory</a> » project. Worked on polynomial factorisation over finite fields

## CONFERENCES

---

2012	INTERNATIONAL STUDENT, POSTGRADUATE AND YOUNG SCIENTIST CONFERENCE «LOMONOSOV-2012», MOSCOW Certificate for an excellent report «Statistical method of interpolation surface construction (kriging)»
------	---

## WORK EXPERIENCE

---

2011–2013	Programmer at <a href="#">ROCK FLOW DYNAMICS</a> , Moscow Hydrodynamic Reservoir Simulation Parallel (pthreads) implementation of kriging, implementation of sequential Gaussian simulation and corresponding graphical user interface (OpenGL)
-----------	---

## COMPUTER SKILLS

---

LANGUAGES:	C, C++, Python, MATLAB, $\text{\LaTeX}$
VERSION CONTROL:	Git
OPERATION SYSTEMS:	LINUX, MacOS

## SPOKEN LANGUAGES

---

RUSSIAN:	Native
ENGLISH:	Upper-Intermediate
FRENCH:	Intermediate
BULGARIAN:	Intermediate
GERMAN:	Beginner

## RESEARCH INTERESTS

---

APPLIED MATHEMATICS:	Uncertainty quantification Large sparse linear systems solving Numerical methods in spatial geostatistics
----------------------	---

## ACTIVITIES

---

SPORT	ARTISTIC GYMNASTICS Advanced Degree ATHLETICS Advanced Degree in 50-meter distance
WORK CAMPS	VOLUNTEERING IN FRANCE Environmental Work Camp in 2011, constructional Work Camps in 2006 and 2008 VOLUNTEERING IN SOUTH KOREA Environmental Work Camp in 2010, art Work Camp in 2010
OTHER	TANGO, HISTORICAL DANCES, DRAWING

# Specialist of Science in MATHEMATICS

## Grades

EXAM	GRADE
Calculus	5/5
Real Calculus	4/5
Complex Calculus	5/5
Functional Calculus	4/5
Variation Calculus and Optimal Control	5/5
Algebra	5/5
Linear Algebra	5/5
Analytical Geometry	5/5
Discrete Mathematics	5/5
Mathematical Cybernetics	5/5
Number Theory	5/5
Models and Algorithms in Bioinformatics	5/5
Classical Differential Geometry	5/5
Differential Geometry and Topology	5/5
Probability Theory	5/5
Statistics	5/5
Random Processes Theory	4/5
Ordinary Differential Equations	5/5
Partial Differential Equations	5/5
Non-linear Equations of Mathematical Physics	5/5
Mathematical Logic	4/5
Programming	5/5
Parallel Programming	5/5
Fast Calculations	5/5
Numerical Methods	5/5
Classical Mechanics	5/5
Analytical Mechanics	5/5
Mechanics of Continuous Media	5/5
Physics	5/5
Quantum Field Theory	5/5
English Language	5/5
Economics	5/5
History	4/5
Philosophy	5/5
Course Work'11	5/5
Course Work'12	5/5
Diploma Work	5/5
State Exam	5/5