

Petar Ivanov

born: 29 MAY 1989 in Shumen, Bulgaria
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SUMMARY

Bachelor graduate with solid background in algorithms and data structures.
Winner of multiple programming competitions. Did several research internships.
Enjoys teaching and communicating science. Software engineer at Google.

SKILLS

Algorithms: Graphs, Combinatorics, Strings, Geometry, Optimization, Dynamic Programming
Programming: C/C++ (STL), Python (NumPy, SciPy, Matplotlib), Ruby, MATLAB
Tools: Unix, Bash, Vim, Git, \LaTeX
Natural languages: English, Russian, Bulgarian

EDUCATION

SEP 2009 — JUN 2013 <i>(interrupted by visa issues)</i>	Specialist degree <i>(equivalent to Master)</i> in Applied Mathematics and Informatics Moscow State University, Russia // more calculus got Bachelor degree in Computer Informatics from Shumen University, Bulgaria in 2014 // could not enter Russia
SEP 2011 — JUN 2013	Master degree <i>(not accredited)</i> in Bioinformatics // + taught algorithms to biologists Yandex School of Data Mining, Moscow, Russia
SEP 2008 — JUN 2009 <i>(moved to Moscow University)</i>	Bachelor degree in Computer science // instructor of advanced algorithmics course Sofia University, Bulgaria // mainly discrete maths
SEP 2000 — JUN 2008	Mathematics and Physics class // award for most scientific achievements of his year Shumen High school of Sciences, Bulgaria

Additional:

JAN 2011	VISION AND MACHINE-LEARNING RESEARCH SCHOOL, ENS Lyon, France
JUL 2008	RUSSIAN SUMMER INFORMATICS CAMP, Kostroma, Russia // 3 weeks of problems and theory
AUG 2007	PHYSICS CAMP, Panitsite, Bulgaria // 3 weeks of maths and physics
2004 — 2007	SUMMER RESEARCH INFORMATICS CAMP, Varna, Bulgaria // 2-week problem solving
2001 — 2008	MATHEMATICS AND INFORMATICS PRIVATE SCHOOL “A&B”, Shumen, Bulgaria

WORK

SEP 2014 – Software Engineer
NOW Google Zurich

INTERNSHIPS

JUL 2013 – Summer internship on [SPAdes](#) open source **genome assembler** // chimera presentation: [\[PDF\]](#)
AUG 2013 // proof of concept demonstrated: replication bugs to enhance assembly in open source assembler
supervised by Dr. Pavel Pevzner, [Algorithmic Biology Lab](#), St. Petersburg Academic University

SEP 2012 – Microbiological models designer // microcin antibiotic model: [\[Summary\]](#)
JUN 2013 [Institute of Gene biology](#), Russian Academy of Sciences

JUL 2012 – Research internship on probabilistic verification of **biological models**
AUG 2012 // proposed own topic on virus-bacteria interaction: [\[Summary\]](#)
supervised by Prof. Martin Vechev, [Software Reliability Lab](#), ETH Zurich

JUL 2011 – **Computational Geometry Algorithms Library (CGAL)** internship
AUG 2011 [Google Summer of Code](#) // implemented topological operators on tetrahedral meshes

JUL 2007 – Developer of a bin-packing **genetic algorithm** for glass cutting optimization
SEP 2007 [Telepol Net](#), Bulgaria // appreciating evolution and first algorithm in production

TEACHING

NOV 2013 – Students **informatics competitions** trainer // sketching an algorithmic textbook
JUN 2014 *Mathematics and Informatics Private School “A&B”, Shumen, Bulgaria*

NOV 2013 – Technical Assistant in a Coursera **bioinformatics course** // lectures editing, forum explanations
JAN 2014 supervised by Dr. Pavel Pevzner, University of California, San Diego

AUG 2010 Lecturer at school students **informatics camp** // the best informatics camp
[Russian Summer Informatics Camp](#), Saratov

MAR 2008 – Assistant in “**Design and Analysis of Algorithms**” course // had seminars with my own group
JUN 2009 *Faculty of mathematics and informatics, Sofia University, Bulgaria*

SEP 2008 – Jury, organizer, tester and author of the problems in **Online programming tournament**
JUN 2009 *Musala Soft, Bulgaria* // mainly discrete optimization problems

SEP 2008 – Author of problems in all **Bulgarian Tournaments in Informatics**
JUN 2009 Lecturer in the **National Informatics Camps**
National Committee in Informatics, Bulgarian Ministry of Education

AWARDS

the competitions are National Bulgarian if nothing else stated

1 st place	“MINKO BALKANSKI” COMPETITION IN INFORMATICS ’08
11 th place	TOPCODER HIGH SCHOOL FINALS, WEST LAFAYETTE, USA ’08
1 st place	AUTUMN TOURNAMENT IN INFORMATICS ’07
1 st place	STUDENT COMPETITION FOR THE DEAN’S CUP OF SOFIA UNIVERSITY ’07
2 nd place	INTERNATIONAL YOUNG PHYSICISTS TOURNAMENT (REGIONAL, IN TEAM) ’06
1 st place	“RUMEN GROZDANOV” INFORMATICS AND MATHEMATICS TOURNAMENT ’06
1 st place	WINTER TOURNAMENT IN INFORMATICS ’06

- Awarded as a **National Laureate in Informatics**, Bulgaria ’08
- Scholarship for **science achievements** of [AMERICAN FOUNDATION FOR BULGARIA](#) ’07–’08
- Participated in the **final rounds** of the BULGARIAN OLYMPIAD IN INFORMATICS ’05–’08
- Participated in the **final rounds** of the [TOPCODER HIGH SCHOOL](#), West Lafayette, USA ’07–’08
- Participated in the **final rounds** of “[MUSALA SOFT AND PC MAGAZINE](#)” competition ’07–’08

ACTIVITIES

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|---------------------------------------------------------------|--------------------------------------------------------------------------------|
| • Solves algorithmic problems | // TOPCODER , TIMUS , ROSALIND |
| • Contributes to open source projects | // GitHub profile |
| • Founded a project for describing educational systems | // students-abroad.info |
| • Loves hiking, biking, orienteering and running | // 42.195km in 3:43h – Zelenograd, Russia, Dec 2011 |
| | // 100km in 13:19h – Vitosha mountain, Bulgaria, Jul 2012 |