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 Bio&IT-oriented 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 2014 — Sep 2015 (exp.)
Master degree in **Software Engineering**, Distance education
Shumen University, Bulgaria

Sep 2009 — Jun 2013
(interrupted by visa issues)
Specialist degree *(equivalent to Master)* in **Applied Mathematics and Informatics**
Moscow State University, Russia // calculus, Computer vision
↓ transferred as I could not enter Russia

Jun 2014
Got a Bachelor degree in **Computer Informatics**
Shumen University, Bulgaria

Sep 2011 — Jun 2013
Master degree *(not accredited)* in **Bioinformatics** // + taught algorithms to biologists
Yandex School of Data Mining, Moscow, Russia

Sep 2008 — Jun 2009
(moved to Moscow University)
Bachelor degree in **Computer science** // instructor of advanced algorithmics course
Sofia University, Bulgaria // mainly discrete maths

Sep 2000 — Jun 2008
Mathematics and Physics profile // 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

INDUSTRY

SEP 2014 — NOW	Software Engineer at Search ⊃ Knowledge ⊃ Infrastructure *Google Zurich* // big data, messy pipelines and loads of code

INTERNSHIPS

JUL 2013 — AUG 2013	Summer internship on SPAdes open source genome assembler // chimera presentation: [PDF] // proof of concept: replication bugs to enhance assembly in open source assembler *supervised by Dr. Pavel Pevzner, Algorithmic Biology Lab, St. Petersburg Academic University*
SEP 2012 — JUN 2013	Microbiological models designer // microcin (antibiotic) modelling [Summary] *Institute of Gene biology, Russian Academy of Sciences*
JUL 2012 — AUG 2012	Research internship on probabilistic verification of biological models // insisted on my own topic on virus-bacteria interaction (didn't work) [Summary] *supervised by Prof. Martin Vechev, Software Reliability Lab, ETH Zurich*
JUL 2011 — AUG 2011	Computational Geometry Algorithms Library (CGAL) internship Google Summer of Code // implemented topological operators on tetrahedral meshes
JUL 2007 — SEP 2007	Developer of a bin-packing genetic algorithm for glass cutting optimization *Telepol Net, Bulgaria* // appreciating evolution and first algorithm in production

TEACHING

NOV 2013 — JUN 2014	Students informatics competitions trainer // sketching an algorithmic textbook *Mathematics and Informatics Private School "A&B", Shumen, Bulgaria*
NOV 2013 — JAN 2014	Technical Assistant in a *Coursera* Bioinformatics course // lectures editing, forum explanations *supervised by Dr. Pavel Pevzner*, University of California, San Diego
AUG 2010	Lecturer at school students informatics camp // strongest Russian competitors *Russian Summer Informatics Camp, Saratov*
MAR 2008 — JUN 2009	Assistant in "Design and Analysis of Algorithms" course // led seminars to a group of 20 people *Faculty of mathematics and informatics, Sofia University*, Bulgaria
SEP 2008 — JUN 2009	Jury, organizer, tester and author of the problems in Online programming tournament *Musala Soft, Bulgaria* // mainly discrete optimization problems
SEP 2008 — JUN 2009, 2013 — 2014	Author of problems for Bulgarian Tournaments in Informatics Lecturer at National Informatics Camps *National Committee in Informatics, Bulgarian Ministry of Education*

Awards

1st place	"Minko Balkanski" Competition in Informatics '08
11th place	TopCoder High School Finals, West Lafayette, USA '08
1st place	Autumn Tournament in Informatics '07
1st place	Student Competition for the Dean's cup of Sofia University '07
2nd place	International Young Physicists Tournament (regional, in team) '06
1st place	"Rumen Grozdanov" Informatics and Mathematics Tournament '06
1st 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

- Solves algorithmic problems   // TopCoder, Timus, Rosalind
- Enjoys opening the source   // GitHub profile
- Founded a project for describing educational systems   // students-abroad.info
- Relaxes by hiking, biking, dancing, paragliding and running   // **42.195km in 3:43h**, Zelenograd, Russia, Dec 2011
  // **100km in 13:19h**, Vitosha mountain, Bulgaria, 2012