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 // chimeras presentation
// 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