

First European Junior Olympiad in Informatics

Krassimir MANEV¹, Biserka YOVCHEVA²

¹*Dept. of Informatics, New Bulgarian University
21, Montevideo str., 1618 Sofia, Bulgaria*

²*Konstantin Preslavsky University of Shumen
115 Universitetska str., 9700 Shumen, Bulgaria
e-mail: kmanev@nbu.bg, bissyy@yahoo.com*

It is out of doubt that computer programming is “the fundamental activity of CS” (Ben-Ari, 2015) and a core of the preparation of the software engineers of all levels and branches. Unfortunately, there is no much place for teaching Informatics and Information Technologies in the secondary school curriculum in most of the countries of the world (Ackovska *et al.*, 2015). Competitions in programming, including International Olympiad in Informatics as well as different regional contests for secondary school students, are one of the possibility to start preparation of students from secondary schools for carrier in the domain earlier.

It is quite reasonable the question: When to start teaching of programing for young people with corresponding interests? Almost half of the top 100 contestants of IOI have 3 or more participations. So in age 15 or less these students were prepared to win an IOI medal, i.e. they started to learn programming and algorithms in age about 11–12. In some countries students of this age compete in programming contests. For most of them it is difficult to enter even the long lists of their national IOI teams and to participate in some of the international contests.

In 2007 Serbia organized the First Junior Balkan Olympiad in Informatics (JBOI) for school students of age less than 15.5 years (at July 1 of 2007) with Regulations similar to that of the Balkan Olympiad of Informatics (2 days, 3 tasks for 4 hours each day). In 2008 Bulgaria made the second JBOI. Then the contest was organized not each year because of lack of a host country. In such years an alternative 1 day contest of junior teams of some Balkan countries was organized inside the International Tournament in Informatics “John Atanasov” held each November in Shumen, Bulgaria. The effect of JBOI’s was resumed and the results published in (Yovcheva *et al.*, 2009). It becomes apparent that organizing of competitions for students of age less than 15.5 years leads to their better training in programming, and attracts more students of this

age to activities in the domain. Medalists of JBOI are very successful in IOI and later in ICPC.

Because the number of participating countries in JBOI is small the idea for extending JBOI to an European contest in programming for juniors was promoted. And this year, finally, the idea will be implemented.

The first **European Junior Olympiad in Informatics**, EJOI 2017, will be held in Sofia, Bulgaria, from September 7th to September 13th, 2017. In order to participate in EJOI 2017, students should be born after **December 31st 2001**. EJOI is an individual programming contest for young programmers from **Council of Europe countries**. The Olympiad will be similar to the International Olympiad in Informatics. Each country can participate with a team of 4 students at most, elected by the procedure adopted in their country. There will be 2 contest days with 3 tasks each day that have to be solved for 4 hours. The programming languages will be C/C++ and Java, the operating systems – Windows and Linux. Grading system of EJOI will be CMS. Translation of the task will be performed with the translation system of IOI.

The President of Republic of Bulgaria, Mr. Rumen Radev, as well as Mr. Tibor Navracscics, the Commissioner of European Union for Education, Culture, Youth and Sport, will be Patrons of the Olympiad.

EJOI will provides a great opportunity for youngest programmer to demonstrate their abilities in Informatics, to exchange knowledge and to enhance cross-cultural contacts in school education. Coming to EJOI 2017, they will have the chance to make new friends, to visit a friendly country, and to discover the culture of Bulgaria.

At www.ejoi.org it is possible to find: the proposal for Rules of the Olympiad, links to sites of the previous JBOI and tournament with used tasks (that could be used as an indication of kind of task that have to be expected till a Curriculum of EJOI is developed), list of the countries that would like to participate and other information about the contest.

References:

- Ackovska, N, Németh, Á.E., Stankov, E., Jovanov, M. (2015). Creating an international informatics curriculum for primary and high school education. *Olympiads in Informatics*, 9, 205–212.
- Ben-Ari, M. (2015). In defense of programming. In: *Proc. of the ACM Conference on Innovation and Technology in Computer Science Education*, Vilnius, 2. <http://dx.doi.org/10.1145/2729094.2742581>
- Yovcheva, B., Momcheva, G., Petrov, P. (2009). jBOI – one more possibility for increasing the number of competitors in informatics. *Olympiads in Informatics*, 3, 167–173.



Kr. Manev is a professor of Discrete mathematics and Algorithms in New Bulgarian University, PhD in Computer Science. He has published 75 scientific papers and more than 30 textbooks in the field of Informatics and Information technologies. Member of Bulgarian National Committee for Olympiads in Informatics since 1982 and President of NC from 1998 to 2002; member of the organizing team of IOI'1989 and IOI'1990, Chairmen of IOI'2009 and Leader/Deputy Leader of Bulgarian team for IOI in 1989, 1998, 1999, 2000, 2005 and 20014. From 2001 to 2003 and from 2011 to 2013 he was elected member of IC of IOI, since 2005 to 2010 represented in IC the Host country of IOI'2009. Now he is a President of IOI for the period 2010–2013.



B. Yovcheva is a senior lecturer in informatics in The Konstantin Preslavski University of Shumen and a director of A&B School of Shumen, PhD in Pedagogy of computer science education. **She is Leader/Deputy Leader of the national team of informatics for 15.5 years of Bulgaria, 2007, 2008 and 2009.** She published over 50 scientific papers and many methodical works, wrote 20 textbooks in informatics and IT for secondary and high education. She was a member of Scientific committee of JBOI 2016. She is a member of Bulgarian National Committee for Olympiads in Informatics.