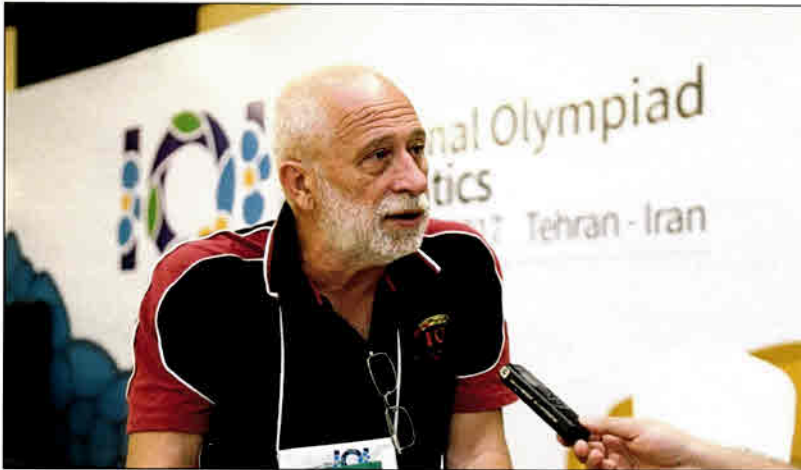


Krassimir Manev:

Humanity Needs More Programmers



29th International Olympiad in Informatics

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Islamic Republic of Iran
Ministry of Education



Shahid Rajee
Teacher Training University



Young Scholars Club



Sharif University of
Technology

Please tell us about yourself.

I am Krassimir Manev, President of the IOI Committee and Professor of Discrete Mathematics and Algorithms in New Bulgaria University. Before that, I worked for many years in the University of Sofia, which is Bulgaria's best university.

I've been in IOI from its very beginning. I helped organize the first Olympiad in Pravets, in 1989. I coached the second Bulgarian team in the first Olympiad. Following that I continued to coach teams for many years. Later I entered the International Committee and have been a member for 11 years. For the past 3 years, I have been the Committee President.

What are the Goals of IOI?

Informatics and technology are being used throughout the world today. Some people believe we've reached our software programming limits. This isn't true. In the near future, we are going to need more and more software programming.

For example, cars are becoming more intelligent, and this is based on new software written by our students, who are the future of technology and our planet.

So, the goal of the Olympiad is to attract young people to informatics as early as possible. This is the big Olympiad, but in the autumn, in Bulgaria, we will hold the European Olympiads for juniors, or 15 to 16 year olds. I think we need to discover the talented individuals as soon as possible so we can start to prepare them sooner.

Unfortunately, secondary schools, not only in Bulgaria, but all over the world do not accommodate teaching informatics. For example, Bulgaria, which ranks 5th or 6th in the world in the Olympiads, offers 72 hours of informatics for only one year in its educational system. If you compare it to math, which is taught every year, it is very strange that

informatics, a much more difficult subject, is taught for only a year. Informatics should actually be taught every year of the student's educational program.

Currently, the process of preparing contestants for the Olympiad is the only way we have been able to teach the youth informatics. Otherwise, students coming from the secondary schools and universities not prepared in informatics.

The other goal is to have a community to exchange ideas. For example, we had a conference on Tuesday with leaders reporting on how they are overcoming the fact that informatics is not being taught in schools. We are searching for other forms of teaching besides through contest. Contests have a time limit, where those individuals who are able to make a very good program in a limited time frame, succeed. However, some students are excellent programmers but are not able to work under the pressure of time. We can design a contest where students make their project at home, then present their project and get ranked based on the quality of their work. So different kinds of efforts are necessary in order to attract young people to informatics.

The third goal is to develop friendship. Currently, the world is in a bit of disarray. Our community here is a model of how the world should be. The people in the world need to gather and work together to ameliorate its problems, instead of making wars and creating destruction in it. It is our goal to show that people from different countries, religions, and philosophies can work together to make something better.

As IC President, what message do you have for the teams and contestants?

IOI is important, but if you are interested in informatics, you must look to improve your skills in programming. Even if you don't come out of this contest at the top, remember that what

makes a pyramid strong is a large base. That means we need more individuals learning how to program.

Our youth with good math skills should pursue programming. If you consider the market for programmers, companies are searching for new programmers every day. The world needs more programmers.

How has IOI 2017 been so far?

Everything has gone smoothly. The organization has been perfect. Iran is a very experienced country who has been participating in Olympiads for many years. The Iranian team is one of the best, and ranks among the top ten in the world. It's a bit hot here but that's normal for this time of the year.

What Improvements have we had?

Each year we are making improvements to our facilitation of the event. This year we utilized a new system that allows us to show results and transmit it to the world during the contest. This makes us a very unique Olympiad. However, with Math Olympiads, it takes 2 days to receive the results. In most Olympiads, the solutions must be evaluated after the contest.

We have also improved our translation system, which can be very useful to other Olympiads. Actually, we can create many programs for other Olympiads. We are able to create these systems because we are programmers; this allows us to not only help other Olympiads, but to help humanity as a whole.

What do you think about Iran?

This is my second time in Iran but this has been a work trip for me. Unfortunately, I haven't had the time to travel around and explore. However, I plan to return to Iran to see the Persian Gulf, the north region by the Caspian Sea and the places your colleagues shared with us via film which looked very interesting.

Unofficial Results for Contest have been Released

The second day of the IOI 2017 contest has ended and the unofficial results have been posted on the event website.

In the second round of the contest, contestants were engaged, to the very last second, trying to solve the tasks.

Yuta Takaya, solved two of the three tasks on the first day of the contest and on the second day he was able to solve all three. For this reason he has become the star of the contests.

Below you have the unofficial results of the top thirty individuals of the IOI 2017 contests. After all disagreements have been reviewed and addressed, the official results will be announced on Thursday, at the closing ceremony.

Rank	First Name	Last Name	Day 1	prize	simurgh	books	Day 2	Global
1	Yuta	Takaya	289.52	100	100	100	300	589.52
2	Mingkuan	Xu	274.2	100	100	50	250	524.2
3	Zhezheng	Luo	198.53	97.74	70	100	267.74	466.27
4	Riku	Kawasaki	195.66	100	100	50	250	445.66
5	Satoru	Kawaharai	196.88	97.68	51	100	248.68	445.56
6	Joseph	Benton	183.81	100	51	100	251	434.81
7	Encho	Mishinev	237.06	90	51	50	191	428.06
8	Anton	Tsytko	215.01	98.85	51	50	199.85	414.86
9	Lukas	Michel	141.57	100	70	100	270	411.57
10	Richard	Gong	210.78	98.58	51	50	199.58	410.36
11	Ștefan	Constantin-Buliga	229.66	97.36	30	50	177.36	407.02
12	Mariusz	Trela	204.8	97.65	51	50	198.65	403.45
13	Jason	Yuen	200.89	97.79	51	50	198.79	399.68
14	Attila	Gáspár	291.24	20	30	50	100	391.24
15	Tamio-Vesa	Nakajima	221.58	97.94	0	70	167.94	389.52
16	Jeyoun	Si	137.14	98.07	51	100	249.07	386.21
17	Brian	Chau	182.54	90	13	100	203	385.54
18	Seyed Mohammad Hossein	Nematollahi	163.03	90	51	70	211	374.03
19	Vladimir	Romanov	174.36	97.67	51	50	198.67	373.03
20	Filip	Bialas	171.25	100	0	100	200	371.25
21	Chung-Yao	Cheng	188.17	100	13	70	183	371.17
22	Jerry	Mao	139.24	100	30	100	230	369.24
23	Anadi	Agrawal	165.77	100	51	50	201	366.77
24	Pedro	Henrique Sacramento de Oliveira	185.81	95.11	30	50	175.11	360.92
25	Zhixian	Zhong	139.11	97.61	51	70	218.61	357.72
26	Tuan	Le Quang	192.95	97.08	51	12	160.08	353.03
27	Denis	Shpakovskii	155.09	94.9	51	50	195.9	350.99
28	Yik Chun	Wong	144.9	98.15	51	50	199.15	344.05
29	David	Wärn	110.6	96.43	30	100	226.43	337.03
30	Arash	Mahmoudian Bidgoli	130.24	99.66	51	50	200.66	330.9



Close-Up



Interesting Tasks

Ricardo Anido, is the Executive Director of the International Committee. Anido, said the IOI 2017 has been very well organized. He said, "The tasks have been very interesting and challenging for contestants and overall a good selection of tasks."

Anido from Brazil, explained how contestants are chosen in his country. he said, "We have a national competition that runs through three phases. The first phase is conducted through the schools; the best students move on to the state level, then the national level. Finally, the top students are invited to take part in a week of classes and examinations to be selected for the IOI. Further training takes place prior to the Olympiad."

He emphasized, "Since selection is based purely on performance, we're not the ones choosing them, they are choosing themselves."

Anido believes Iran is a very nice country. His family had wanted to come with him, but the school term had already started in Brazil and his kids, and his wife, who is a teacher, need to wait for another opportunity.



I love Iranian food

Fredrik Niemelä, team Leader of Sweden, was happy that the contest went smoothly. He said, "That's the most important consideration." He believes it has a lot to do with the fact that the organizers had been well prepared.

However, he added that another important consideration is the food, and it has been "awesome." "I love the food here!" he exclaimed.

He also said, "I love all the excursions we've been on so far; they've been very interesting."

Despite the hot weather, he was grateful that the buses always had plenty of water, and said, "It's definitely worth the sweat to see everything."

On the IOI 2017 tasks, he said, "The tasks this year have been very good. They are short and clear. I think that's excellent. I remember, not too many years ago, when we had one problem that was 7 pages long. This year every problem was two or three pages and very few revisions were needed. The Scientific Committees have done a great job this year."

On how his team performed, he said he was surprised by the performance of his members in both contests, and that overall he was optimistic that his team would perform even better in the few hours that were left.



TODAY'S SCHEDULE WEDNESDAY AUGUST 2

Time	Contestants	Leaders	Visitors
06:00 – 08:30		Breakfast	
08:30 – 09:30		Transfer	
09:30 – 11:00	Water Park (Opark)	Golestan Palace	
11:00 – 12:00		Grand Bazaar	
12:00 – 13:00	Lunch (Opark)		
13:00 – 14:00	Transfer	Lunch (Shahr Park)	
14:00 – 16:30	Azadi Tower & Handicraft Exhibition	National Museum	
16:30 – 17:30		National Garden	
17:30 – 19:00		Transfer	
19:00 – 22:00		Barbecue (Evin Hotel, Pool)	

Places to Visit: Wednesday



National Museum

The National Museum of Iran consists of two buildings: the Museum of Ancient Iran, and the Museum of the Islamic Era.

The Museum of Ancient Iran consists of three halls. The halls contain artifacts and fossils from the lower, middle, and upper Paleolithic ages up to the Iron ages I-III. The Iron ages cover Median, Achaemenid, Seleucid, Parthian, and Sassanian eras.

This museum holds artifacts of great historic significance, including pottery vessels, bronze and stone statues, rugs and textile remains, rare books and coins with ancient inscriptions.

One of the many interesting exhibits is the Salt Man. It is speculated that he was a miner who died during the 3rd or 4th century AD, but his white-bearded head, legs in a leather boots and tools were preserved by the salt in which he was buried.

Golestan Palace



Golestan Palace is the former royal Qajar complex in Iran's capital city, Tehran. Most of this complex was built during the 200-year rule of the Qajar dynasty in the 18th and 19th century.

Golestan Palace is one of the oldest historic monuments in the city of Tehran; it is also qualified as a World Heritage Site. Golestan Palace is among a group of royal buildings that were once enclosed within the mud-thatched walls of Tehran's Arg (citadel). The citadel was built during the 16th century.

Golestan Palace contains the most complete representation of Qajari artistic and architectural production and bears witness to the center of power and arts at the time.

Furthermore, Golestan Palace can be considered an exceptional example of an east-west fusion in monumental arts, architectural layout and building technology. This fact has made it a source of inspiration for modern Iranian artists and architects. Amongst its features are exquisite mirror works, plaster moldings, mosaic covered floors, fine stained glass windows, intricate tile work, marble and wood carvings and the unique cooling system of the time.

National Garden



The National Garden is a historic governmental complex in Tehran, Iran.

Formerly referred to as the Parade Square, it used to be a military shooting range during the Qajar period. Later, under Pahlavi rule, it was turned into a public park. Over time, important governmental offices and museums were built around it. The famous gate to the compound was built before the beginning of WWII.

Situated in this compound today are: parts of the Ministry of Foreign Affairs, the University of Art, Malek National Museum, Post and Communication Museum, and the National Museum. The University of Art is the biggest art university in Iran. Malek National Museum is the first private museum in Iran.

OPark



OPark, with the intention of creating an exciting, unique and memorable experience for individuals and families, opened its doors in the spring of this year. The park encompasses an area of 5 hectares, and is one of the largest indoor water parks in Tehran. Designed with high standards of safety, quality, and services, it includes the most advanced slides in the world, and a state-of-the-art water treatment system.

The park has a number of exciting features: 14 thrill-filled slides especially for adults, an Abyss which spans 18.5 meters in length, a 6 meters tall spiral structure, Elopia Island, tsunami pool, and roaring river. The facility also houses a coffee shop and a restaurant with a wide.