

# BOI Newspaper



## Goodbye! See you later!

Dear reader, you're holding the last edition of the BOI Newspaper. And as usual, it is always a little hard to say goodbye. But the good thing about BOI is that it always comes back in a year. We had a lot of fun with you together, and we hope your stay in Palanga was enjoyable as well. We hope to see you all again, coming back as contestants, team leaders or even organisers! And now, on to the news!

Today is the last official day of the 20th Baltic Olympiad in Informatics and the winners of the Olympiad will soon be awarded. We were lucky to catch the absolute first place winner, Jarosław Kwiecień from Poland, for a quick chat - check it out on page three!

The second competition day turned out to be harder than the first one. The task Demarcation was partially solved by only one contestant. In the adjacent hall, the members of the Scientific Committee were looking through many solutions to understand what problems were the students having. Luckily, no errors in the task or in the test data were found. All in all, this probably explains why many contestants named computational geometry as their least favourite type of problems.

Once the competition was over, you could feel the relief in the air. Contestants visited Plokštinė Missile Base and the Museum of Cold War. Today, they left for the Curonian Spit for a full day excursion.

After the closing ceremony, let's all meet up for the final dinner together. Au revoir! May the Force be with you!



## Chat



**To run the competition smoothly, only good tasks are not enough. There is always hard work going underneath, behind the scenes. Today we've met with Andrius Paurys, a member of the Technical Committee, to chat and unveil some mysteries of the TC..**

**Hi Andrius! Could you tell us what is the job of the Technical Committee?**

TC takes care of the technical side of the Olympiad. We ensure that participants have good workplaces and good technical environment and don't have to worry about it when solving the tasks. Of course, the ability to

manage your workplace is something every student should have, but that's not what Olympiad is about.

**So you take care of all the computers?**

Basically yes. We have to bring computers, to place them and to set them up. Aside from computers and their software, we also prepare the competition hall – everything has to be tidy and comfortable before and in between the competition rounds.

**How much time do you think it took you to do all the arrangements for the first day?**

Roughly 30-35 hours. There're 6 of us in the Committee. There's also one special person, Vytis, who acts as some kind of liaison between SC and TC, working closely with members of both Committees.

**Were there any special challenges during the Olympiad?**

Nothing we couldn't handle 😊. However, the fact that this is an international event made all the

preparations especially robust – even more robust than during the national finals. Everything had to be perfect. And I think the results were quite good– we didn't have any issues during the contest. Well, there was one, but it got resolved very quickly.

**Is there any work you still need to do?**

Well, we still have to wrap the things up. It won't take as much time as during arrival, though, as you don't have to worry about the look and configuring of the hardware.

**It's interesting that a lot of contestants end up in TC or SC eventually. As a former contestant, what do you think influences their choice?**

The academical interests, I believe. For example, I was keen to know the organisational-technical part and ended up here, in TC. Those who were more into algorithms and solving tasks went to SC. It boils down to the personal interests and preferences in the end.

## After the competition...



# Jarosław Kwiecień – the winner of BOI!



**We found Jarosław Kwiecień playing table football along with other guys in the lobby. The absolute winner of BOI'2014, he kindly accepted to talk to us. What is his secret to success? Let's find out..**

**How old are you? Is it true that you took the 1<sup>st</sup> place in the Poland National Olympiad?**  
I'm 17. Yes, that's true.

**That's impressive! When did you start programming?**  
I started programming when I was about 12, but it wasn't for the competitions. I used to program games and I began solving algorithmic tasks when I was 14, I think.

**How, who got you into that?**  
In my school, there're people who teach programming for Olympiads in Informatics.

**Outside Informatics, do you also take part in Math, or Physics, or any other Olympiads?**

Yes, in this year, I participated in the finals of Poland Olympiad in Mathematics, but I'm not very good at it. It was luck that I got there.

**Yesterday, another member of Polish team had 300 points, and I think you had 267. How did the second day go for you? What was your strategy?**

First, I started thinking of a solution for each task before I began programming. The first one was Portals and the second one was Postmen. Demarcation was the last one. When I knew how to do all the tasks I started programming, and after 2 hours I got 200 points. Afterwards I tried to finish the last task, but it was really hard.

**So you only solved the first subtask of the Demarcation?**

Yes. Actually, I thought my solution was good for all subtasks, but I probably had a bug.

**What do you do when you have a bug? What do you try out?**

First, I try to make some tests. Usually, when it's possible I make a test generator and a brute-force solution. Then I create about a million tests and check them automatically. Then it's quite easy to find a test on which my program doesn't work. But today it wasn't so simple as generating good tests wasn't a trivial task. I tried to make some tests of my own but it didn't work. So I tried to create

different solution, but it didn't work either.

**You still did an amazing job today! How did you get the other two tasks so fast? Is it training? Have you solved them before?**

No, but for me they were quite simple. And for two other guys from Poland they were simple, too. So it may be in Poland we have similar tasks.

**You code in C++, right? Do you use STL a lot? How did you learn programming?**

Yes, I use STL. At 12, when I started programming, I learned C++ from a very good book. It's called "Symphony in C++", and it's from a Polish author.

**So which competition is next for you?**

International Olympiad in Informatics. Maybe, I'll be in Central European Olympiad in Informatics as well, but I'm not sure if I'll have time. At this time of the year I have a trip to China, my school organises it.

**Best of luck in IOI! You did great! Will we see you next year in BOI?**

I hope so. I still have two more years to take part in the Olympiads.

**Thanks for a talk, Jarosław. Good luck!**

## Results

Country	Contestant	coprobber	friends	sequence	demarcation	portals	postmen	FINAL
Poland	Jarosław Kwiecień	100.0	100.0	67.0	12.0	100.0	100.0	479
Latvia	Aleksejs Zajakins	100.0	100.0	67.0	0.0	100.0	100.0	467
Poland	Jan Tabaszewski	100.0	100.0	34.0	0.0	100.0	100.0	434
Sweden	Johan Sannemo	100.0	100.0	34.0	0.0	100.0	100.0	434
Poland	Konrad Paluszek	100.0	100.0	100.0	0.0	0.0	100.0	400
Poland	Paweł Burzyński	100.0	100.0	34.0	0.0	100.0	55.0	389
Germany	Felix Bauckholt	16.0	100.0	34.0	0.0	100.0	100.0	350
Finland	Sami Kalliomäki	16.0	100.0	34.0	0.0	100.0	100.0	350
Finland	Kalle Luopajarvi	16.0	100.0	34.0	0.0	100.0	100.0	350
Poland	Maciej Hołubowicz	16.0	100.0	34.0	0.0	100.0	100.0	350
Estonia	Oliver-Matis Lill	100.0	100.0	34.0	0.0	100.0	0.0	334
Latvia	Ingus Jānis Pretkalniņš	0.0	100.0	34.0	0.0	100.0	100.0	334
Finland	Petteri Timonen	16.0	100.0	9.0	0.0	100.0	100.0	325
Poland	Tomasz Garbus	16.0	100.0	9.0	0.0	100.0	100.0	325
Sweden	Aron Granberg	60.0	100.0	9.0	0.0	31.0	100.0	300
Lithuania	Domantas Jadenkus	30.0	100.0	9.0	0.0	100.0	55.0	294
Finland	Henrik Lievonen	16.0	100.0	9.0	0.0	100.0	55.0	280
Germany	Paul Gölz	16.0	100.0	34.0	0.0	70.0	55.0	275
Latvia	Pēteris Pakalns	30.0	100.0	34.0	0.0	100.0	0.0	264
Norway	Johan Sokrates Wind	30.0	100.0	25.0	0.0	100.0	0.0	255
Lithuania	Mantas Pajarskas	0.0	100.0	9.0	0.0	100.0	38.0	247
Latvia	Aleksejs Popovs	16.0	100.0	9.0	0.0	20.0	100.0	245
Germany	Gregor Matl	16.0	100.0	34.0	0.0	31.0	55.0	236
Germany	Manuel Gundlach	30.0	35.0	9.0	0.0	100.0	55.0	229
Latvia	Mihails Smoljins	16.0	100.0	9.0	0.0	0.0	100.0	225
Latvia	Kristaps Čivkulis	16.0	100.0	0.0	0.0	100.0	0.0	216
Sweden	Fredrik Hernqvist	16.0	100.0	0.0	0.0	100.0	0.0	216
Estonia	Andres Unt	16.0	100.0	34.0	0.0	0.0	55.0	205
Estonia	Kristjan Kongas	0.0	100.0	0.0	0.0	0.0	100.0	200
Germany	Friedrich Hübner	30.0	100.0	34.0	0.0	31.0	0.0	195
Estonia	Simmo Saan	16.0	100.0	9.0	0.0	20.0	38.0	183
Finland	Tuukka Korhonen	0.0	100.0	9.0	0.0	70.0	0.0	179
Finland	Hannes Ihalainen	0.0	100.0	34.0	0.0	0.0	38.0	172
Lithuania	Gustas Mockus	0.0	100.0	34.0	0.0	0.0	38.0	172
Sweden	Emma Nimstad	16.0	100.0	34.0	0.0	20.0	0.0	170
Sweden	Joakim Blikstad	0.0	35.0	9.0	0.0	70.0	55.0	169
Denmark	Michael Erik Vesterli	14.0	100.0	34.0	0.0	20.0	0.0	168
Lithuania	Kasparas Masiukas	16.0	100.0	9.0	0.0	0.0	38.0	163
Sweden	Mattis Lööv	0.0	100.0	34.0	0.0	20.0	0.0	154
Lithuania	Alanas Plaščinskas	0.0	100.0	34.0	0.0	0.0	0.0	134
Lithuania	Emilijus Stankus	0.0	100.0	0.0	0.0	31.0	0.0	131
Estonia	Siim Sammul	16.0	35.0	9.0	0.0	70.0	0.0	130
Norway	Fredrik Østrem	16.0	35.0	9.0	0.0	70.0	0.0	130
Lithuania	Jurgis Balčiūnas	0.0	100.0	9.0	0.0	20.0	0.0	129
Germany	Moritz Hilscher	0.0	100.0	9.0	0.0	0.0	0.0	109
Estonia	Jaagup Kümmel	0.0	100.0	0.0	0.0	0.0	0.0	100
Norway	Fredrik Aleksander Anfinen	16.0	35.0	34.0	0.0	11.0	0.0	96
Germany	Phillip Wellnitz	0.0	0.0	34.0	0.0	20.0	38.0	92
Norway	Håkon Flatval	0.0	35.0	9.0	0.0	20.0	0.0	64
Lithuania	Michail Chrunov	0.0	0.0	0.0	0.0	0.0	55.0	55
Denmark	Anton Christensen	0.0	35.0	0.0	0.0	0.0	0.0	35
Lithuania	Neringa Levinskaitė	0.0	35.0	0.0	0.0	0.0	0.0	35
Lithuania	Ignas Žebrauskas	0.0	35.0	0.0	0.0	0.0	0.0	35
Norway	Håvard Terland	0.0	35.0	0.0	0.0	0.0	0.0	35
Lithuania	Adomas Boruta	0.0	0.0	9.0	0.0	20.0	0.0	29
Denmark	Carl Dybdahl	0.0	0.0	0.0	0.0	11.0	0.0	11
Lithuania	Andrius Ovsianas	0.0	0.0	9.0	0.0	0.0	0.0	9
Norway	Mikael Stefan Niklas Klages	0.0	0.0	0.0	0.0	0.0	0.0	0