

Targeted solely on success

Minsk student Alexey Ropan and Gomel gymnasium graduate Gennady Korotkevich among world's top 24 programmers

By Olga Sergeeva

Alexey and Gennady are through to the finals of *TopCoder Open 2013* — a prestigious annual individual competition, which gathers IT programmers from around the globe. Viewed as an unofficial world championship, Belarus' success is both pleasant and expected although, in recent years, the country has been developing its information technologies and has gained a reputation worldwide.

'Algorithm' is the most popular event at the competition, envisaging the solution of algorithmic problems and finding others' faults. This year, just 24 young people (out of almost 3,000 entrants, among whom were Belarusians) are going through to the finals — to be hosted by Washington DC's Hilton Hotel, from November 10th-14th. Eleven countries are to be represented, with six programmers from Russia, three from Japan and two from the USA, China, Poland, Taiwan, Ukraine and Belarus. Canada, Slovakia and Georgia are sending one participant each.

Victory for whole country

Professor Mikhail Batura — the Rector of the Belarusian State University of Informatics and Radio-electronics and the Doctor of Technical Sciences — views the victory of his student as being not only an individual triumph but a reflection of the efforts of the Uni-



Students from Belarus proved to be skilled in complicated mathematical tasks

versity and of the state. He tells us, "I know Alexey well. He is a member of the University programming team, which has many times won international competitions. In joining a small group of the best — the world programming elite — it indicates that our University's status is well-deserved. I view the University as a component of our country. Many consider our recent victory grounds for national

pride. Interesting parallels may be drawn: the USA and Japan have larger populations than Belarus so it would seem logical to find more talented people there but it's our guy who has succeeded in joining the leaders."

Prospects for development

Mr. Batura believes that Belarus has good prospects for IT de-

velopment, adding, "Importantly, this branch enjoys state support. Meanwhile, our dynamics of development are well confirmed by the High-Tech Park's activity. Established in 2005, it aims to promote the branch, retaining talented young people. From 2005-2006, Park residents mastered around \$30m in international contracts while, in 2012, the figure rose to \$300m. The number of operating

companies within the Park has risen drastically, now reaching 130 and likely to keep growing. Decades of intensive development lie ahead."

Pleasant surprise

Mr. Ropan is yet to decide on his future plans, telling us, "After defending my diploma paper, I felt free yet needed to choose my next path. I still have no idea. As regards my entry to the *TopCoder Open 2013* finals, this was a surprise. I was anxious during the quarter-finals but, in the semi-finals, didn't expect to succeed against such strong rivals, including Belarusians; accordingly, I felt less nervous and found the tasks easier to solve. My calmness helped me to avoid mistakes. The finals are now coming and I plan to seriously 'fight'. Gennady Korotkevich is an old friend and, after gaining our place in the finals, we chatted by phone to congratulate each other. We kept in touch more before he went to Russia, where he is studying in St. Petersburg."

Alexey admits that the competition allows him to meet and chat with interesting, like-minded people. Regarding his success so far, he notes, "It's actually easier to reach your goal if you set your sights modestly." He refers to the calmness that comes from not placing undue pressure on yourself to perform. In reality, the young men have spent years working hard and deserve their success.

Photos from orbit to use domestically and abroad

Belarus and Russia using joint venture to sell satellite photos

Russia's VNIIEM Corporation (Research and Production Corporation Space Monitoring Systems, Information and Control and Electromechanical Complexes) signed a memorandum in mid-June, in French Le Bourget, with the Belarusian National Academy of Sciences' Geoinformation Systems enterprise. The director of Geoinformation Systems, Sergey Zolotoy, tells us, "A joint venture will allow us to apply Russian experience to the distribution of materials from the Belarusian satellite, across Russian and foreign markets for space technology and services."

At present, the Belarusian-Russian integrated space system includes the Russian satellite Canopus-B and the Belarusian Space Apparatus (BKA). These



Shots from Belarusian satellite

photograph the Earth's surface to within 2m accuracy, across a range of 20km. Another Belarusian satellite and two Russian are soon to be launched.

Belarus launched its remote Earth sensing satellite in July 2012 from Baikonur cosmodrome (Kazakhstan),

allowing complete coverage of Belarus from space. The data has many applications domestically and can be sold abroad to generate revenue. The Ministry of Forests and Soil Conservation of Nepal is already among those having purchased data.

Real time parameters

BelAZ dump truck to be equipped with Belarusian on-board computers

The Minsk Production Association of Computer Engineering Techniques is producing controllers for BelAZ trucks' on-board diagnostics, with the first blocks dispatched. General Director Alexander Panasyuk tells us that, until recently, foreign-made controllers were used in Belarusian machinery.

On-board computers can promptly collect information and track the state of a vehi-

cle — such as tyre tread, fuel consumption or oil levels.

The company also plans to realise a project for the State Border Committee, helping automation; this is to in-



volve China's Huawei Corporation. In addition, the company is keen to explore some other promising projects for domestic and foreign customers. "Almost 2,000 people are employed at the company, involved in production. Our organisation functions independently, without state support," adds Mr. Panasyuk with pride.

Time to arrive

Belarus promoting attraction of foreign scientists

Vladimir Gusakov, the Acting Chairman of the Presidium of the National Academy of Sciences of Belarus, has noted during a press conference for the Russian and Belarusian media that Belarus has little trouble keeping hold of its scientific experts. He

explained, "There are a few individual cases, with most moving to Russia." Scientists from Belarus rarely emigrate to western countries. In fact, various foreign scientists are being attracted into domestic projects in various spheres.

Moreover, Belarus helps train foreign Master's Degree students and

postgraduates. The average age of scientists at the National Academy of Sciences of Belarus now stands at 48 years: down from 49 last year. The number of young scientists at the NAS has considerably increased while its senior executives have become younger on average. Meanwhile, around half of Belarusian scientists are female.