

Recharging Batteries :

Inspirational Science Excursions

BOARD THE BUSES: On Tuesday morning contestants, leaders and guests began a full day of educational excursions to three attractions. Good fortune prevailed and Typhoon Jebi (now ravaging other parts of Japan) had spared Tsukuba, leaving the city pleasantly cool. Eighteen 40-seater coaches stood-by at IOI's dormitory facilities. Boarding Bus No.6, contestant Nurbakyt M handed out Kazakhstan chocolates to everyone - a smart way to introduce himself and make friends. Tour Guide for No.6 was Michiko S, proud of keeping her groups punctual. "In Japan we are never late so we must leave on time. Late is late, even if only by 1 minute" she joked while, of course, not joking at all!

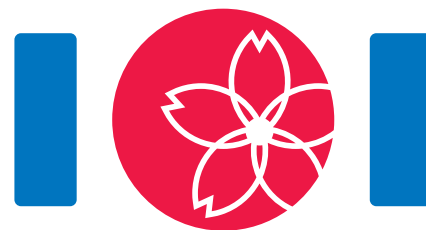
JAXA: At precisely 10:30 (not a minute less) the coach arrived at JAXA (see separate box). Team guides and their country squads - now firm friends - used the Space Center rocket as the perfect backdrop for two-person selfies and full group photos. The ritual seemed to be; take the photos, huddle / compare, instantly share best-shots on social media. Teams also began to split up and join other teams - Ireland with Iceland, Japan with Jordan. (The latter feel a bond because they both compete nationally in "JOI" contests). To hear so many languages spoken around the International Space Station module seemed totally right. The gift shop novelties provided ice-breakers for communicating, especially the bread-in-a-can and blue-colored spaghetti space food, as well as "astronomical toilet paper".

AIST: 11:30 (precisely) back on the coach, now bound for the AIST Geology Museum (see separate box). At the museum, the self-named "Jumping Jordan Japan Team" pounded the floor to make it shake (as measured by a seismic sensor in the floor). Others searched interactive displays to find the location of their nearest active volcano. "Japan also has a great many volcanoes", the Iceland team realized while guide Michiko noted positively "...and thanks to them we can enjoy lovely hot-springs".

EDO: After lunch, everyone was bound for "Warp Station Edo" movie studios (see separate box). Contestants were so busy chatting they didn't need to use the free Wi-Fi on-board. Arriving at the studios, guide Michiko asked; "Have you ever seen a Japanese TV drama?" (no response), "a Japanese movie?" (silence), "Japanese anime?" - LOUD cheers! She had now truly connected with her tour audience.

The tours provided superb resource material and inspiration for future IOI tasks - JAXA's satellite exhibits showcased better forecast tools to sustain Earth's resources

and predict extreme-weather incidents. AIST's Science Square showed how robots are becoming more human (or cuddly seal-like) now that AI and other technologies gift them with speech and motion. The movie studios, a life-size village of the past reproduced in superb realism, showed how far Virtual Reality still has to go to replicate the full stimuli of a 'real-world fantasy'. And the history may be useful for creating new game characters. "You learned the difference between a Shogun and a samurai", applauded Michiko.

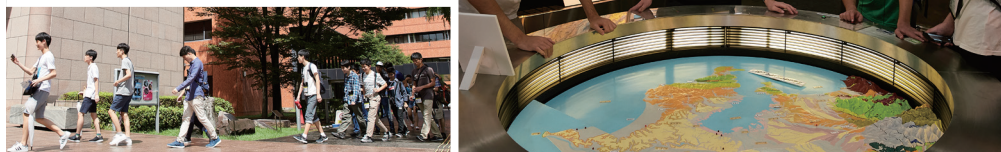


IOI 2018 JAPAN
TSUKUBA, IBARAKI

30th International Olympiad in Informatics 2018

September 1 - 8, 2018 Tsukuba, Ibaraki

Vol.4 Tuesday, September 4, 2018



Tuesday's Schedule September 4, 2018

Time	Contestants	Leaders	Guest
06:10~	Transfer by Bus (KEK→NITS)		
06:30-08:30	Breakfast 6:30-8:00	Breakfast 7:00-8:30	Breakfast 7:00-8:30 (Each Hotel)
08:30-09:00	Transfer by Bus		
	Departure for NITS@9:30	Departure for TICC@9:00	
09:00-17:00	Excursion Tsukuba city tour (Transfer by Bus)	Excursion Tsukuba city tour (Transfer by Bus)	
	Lunch (Multi-Purpose-Hall and Conference Room101.102)		
	Excursion Tsukuba city tour (Transfer by Bus) ~17:00	Excursion Tsukuba city tour (Transfer by Bus)~15:30	Free Time
17:00-18:30	Dinner 17:00-19:30 Fun Time 18:30-21:00 Transfer By Bus (NITS→KEK)	Dinner 17:00-18:30 (Multi-Purpose-Hall and Conference Room101.102)	
18:30~	Free Time	GA Meeting 5: Task Selection and Translation	Free Time

■ TICC : Tsukuba International Congress Center ■ TSUKUBA CAPIO ■ NITS ■ Excursion

CS is about People, People, People !

Tim Bell, a computer scientist from New Zealand, and recipient of the 2018 SIGCSE award for outstanding contributions to computer science education was this year's Invited Speaker for the IOI Conference on Monday. He gave an insightful lecture about CS in K-12 Education clearly illustrating how both teachers and students need to change their focus. Too often potential recruits to the programming field are put off by the scary language of ABC (algorithms, binary, coding) – robbing the industry of talent. One of his students loved coding but could only apply it to playing childish pranks. Another, who loathed computers, ended up with a PhD in Computer Science (and a career with Google), but only through pure chance. Motivated by the tragedy that, as Edna Kerr put it, “young people never discover what they really want to do”, Tim sees the future of programming as dependent, not on books such as “Learn Java in 24hrs”, but on making both students and teachers see how programming ability depends heavily on social skills, not only ABC skills. “Digital technology is all about humans”. A megapixel may exist as a combination of RGB values but it reflects the cone cells of the human eye. Knowing some basic psychology, e.g., that we perceive no delay (= an instant response) when data appears in 1/10 second or less makes coding easier. Furthermore “We need to connect coding to the things that people care about” Tim emphasized. That is how Tim's PhD student changed her mind about computers - when she realized that it helped people do things. He closed by quoting a Maori proverb; “You ask me what the most important thing is? I'll tell you - he tangata, he tanagata, he tangata” (People, people, people) !

Today's Guest

New Zealand computer scientist,
2018 SIGCSE recipient
Tim Bell



Places to Visit

National Institute of Advanced Industrial Science and Technology (AIST):

This science in action research facility aims to bring science and engineering knowledge together to solve socio-economic problems. This was a good place to inspire the young informatician visitors to imagine how their own ideas could be used to solve real-world needs. The tour included two facilities, the Geological Museum and Science Square Tsukuba. The former exhibits rocks and minerals, teaching how and where we obtain natural resources, including marine geology. The latter showed how we can better recycle, for example, the rare metals used in computers while showing off the latest innovations in robotics, regenerative medicine (iPS cells) and unusual innovations such as making 'sherbet ice' from seawater and printed electronics.



Warp Station Edo:

Just beyond Tsukuba city is this life-size re-creation of a traditional Japanese town from the golden age known as Edo (1603-1868). The town was built for Japan's national TV broadcaster NHK and is highly realistic and rich in detail - the 'koi' carp are so real you can actually feed them fish food! Warp Station Edo serves primarily as a large-scale studio set for filming period dramas, movies and TV commercials. It is now also open to the public so visitors can usually encounter a show in production, with actors in costume and props being assembled. The facility offers a time travel experience around four areas, namely an Edo Townhouse zone, Edo Castle zone and two open-sets called Inn Town and Downtown. The weather however is real so, when it's raining outdoors, everyone gets wet.



Tsukuba Space Center / JAXA:

On arrival at this 530,000 square-meter site, visitors get to stand under a huge launch rocket mounted on its side. As its name suggests, the Tsukuba Space Center (TKSC), which opened in 1972, is an operations center for Japan's space craft and satellite technologies, as well as a training facility for its astronauts. TKSC serves as both the nucleus for Japan's space-related R&D and headquarters for the Japan Aerospace Exploration Agency (JAXA). The Japanese astronauts working on today's International Space Station train here (as well as in the USA) and a mock-up of the ISS's experimental "KIBO" module is on display. A tour of the facility and exhibits hall features real-size launch vehicles, rocket engines, space suits, transfer vehicles, and satellite systems.



Reflecting Back on Contest-1

The contestant who achieved a perfect 300 score on Monday may have thought Contest 1 was easy but few others shared that luxury. The Sri Lanka team found all the tasks “very tough” in particular the Werewolf challenge. The Korean team, despite all being first-timers, thought the 3 tasks were fun even though difficult to solve. A repeat contestant from Kazakhstan enjoyed the first task most (Combo) but assumed it was intended as an easy starter. ‘Seats’, however was more tricky and took him the most time because data structure tasks are not his forte, but he appreciated the new feature this year that shows statistics.

