

2012/11/18 Coach Workshop, ICPC Regional Tokyo

# Report on the ACM-ICPC World Finals 2012

The University of Tokyo

Takuya Akiba



# Self Introduction



- Takuya Akiba (@iwiwi)
  - M2@U Tokyo → JSPS DC1 Fellowship (from next April)
- (Typical) Programming contest addict
- ICPC: Team “\_\_\_\_\_” (underscores)

**Teams From Japan**

# Team 1 : UEC





# Team 2 : Kyoto U



# Team 3 : U Tokyo !!!



# Team 3 : U Tokyo !!!

- Members
  - Takuya Akiba (*me*)
  - Masaki Watanabe (*crazy math guy*)
  - Kota Yoshizato (*crazy ??? guy*)
- Three **red coders!!**
  - Only four teams had three red coders
    - SPbITMO (1<sup>st</sup>)
    - U Warsaw (2<sup>nd</sup>)
    - National Taiwan University
    - U Tokyo (...?)

**Before the Contests**



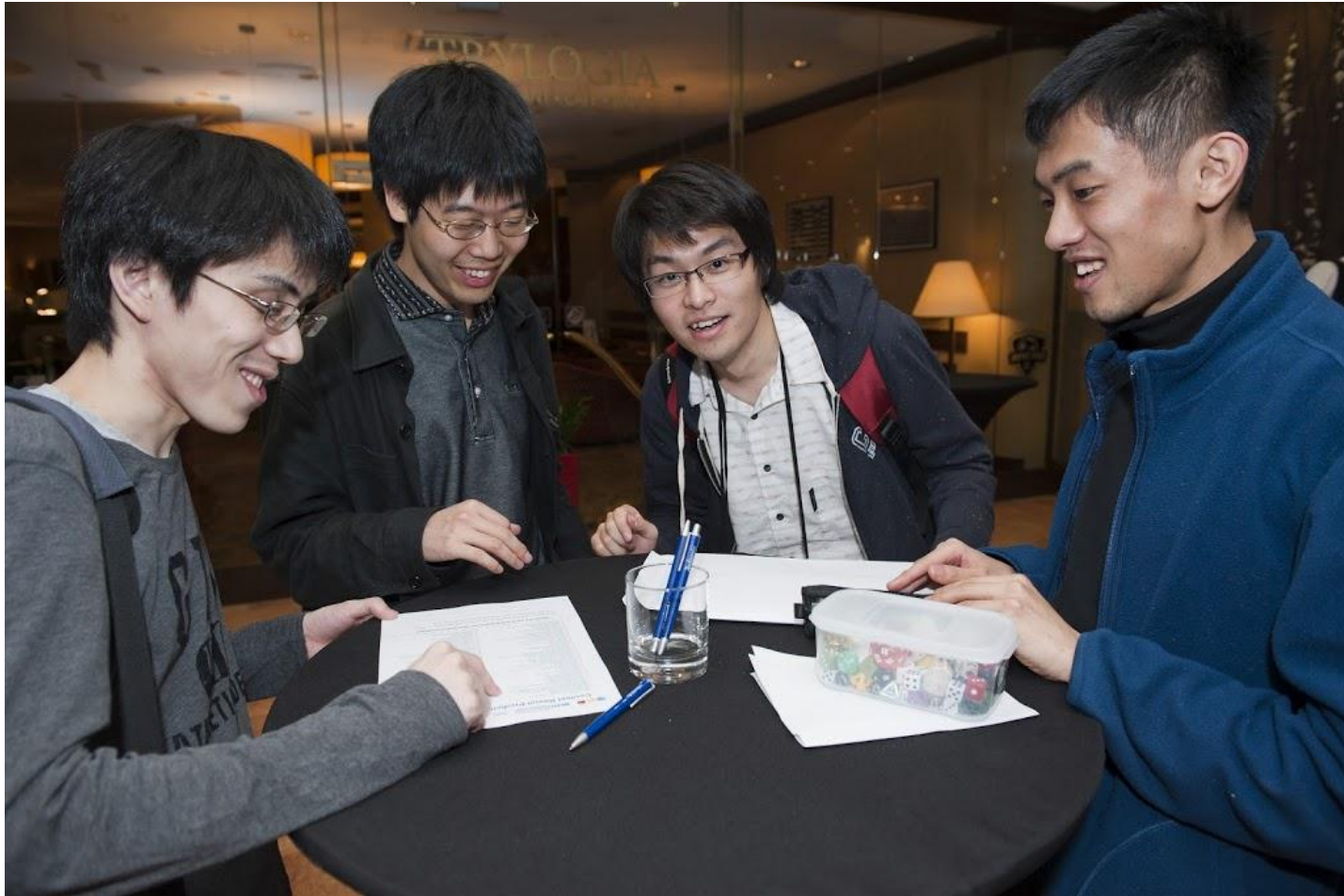
# Things We Did

- Practice, Practice, and, Practice!!
- English Keyboards
- Team Document
  - 25 Pages
  - CD-R (how do they use them?)

# Warsaw



# Team Registration

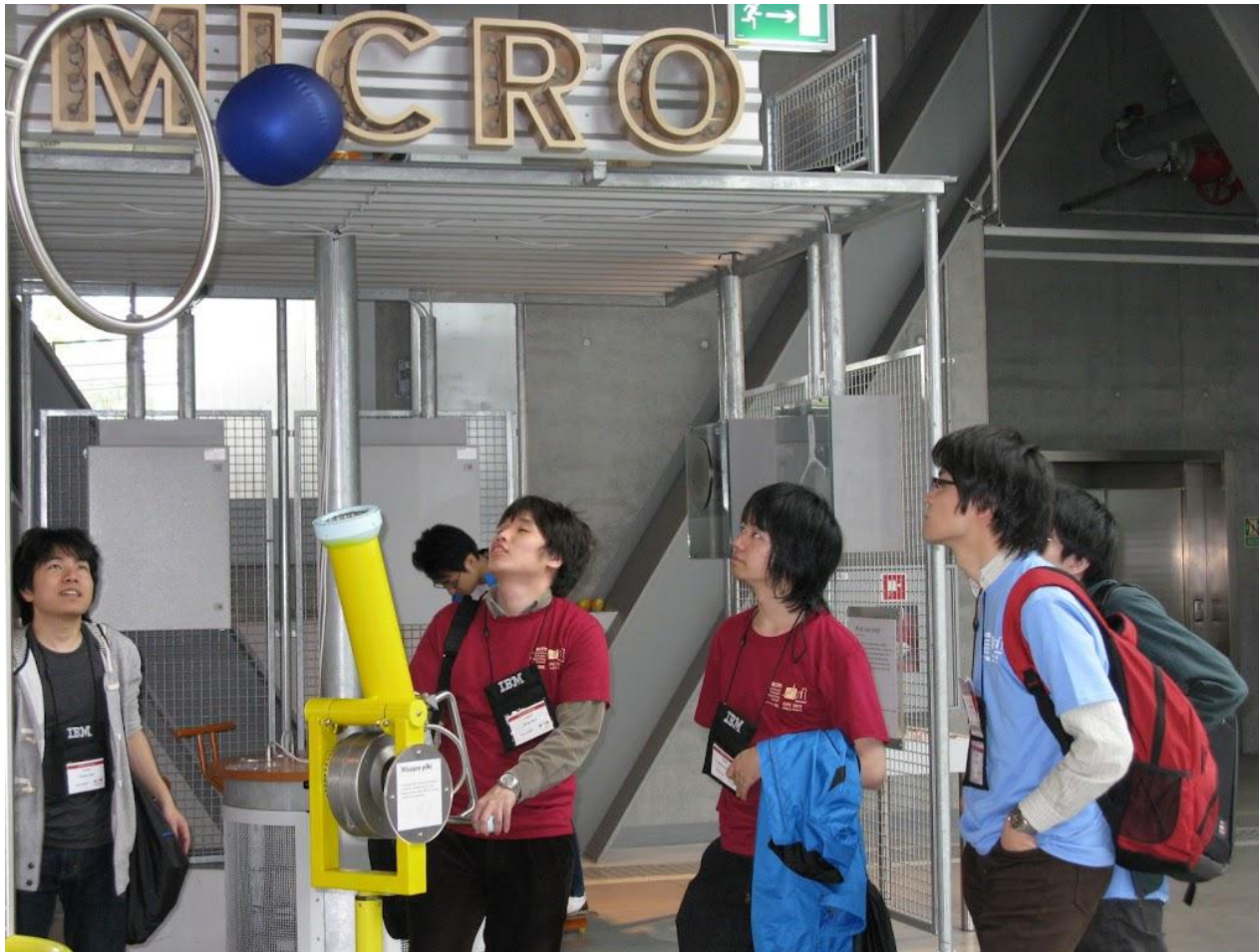




# IBM Talk



# Excursion





# Practice Session





# Rehearsal Session

(Different from Practice Session)



**The Contest!**

























# First AC -> Announce & Picture

(immediately during the contest...)



# Problem Set

ID	Title	Genre	Solved
A	Asteroid Rangers	Geometry + Graph	2
B	Curvy Little Bottles	Easy Math	110
C	Bus Tour	Bit DP	76
D	Fibonacci Words	Ad-hoc	96
E	Infiltration	Search <i>(very cool!)</i>	31
F	Keys	Tree DP	2
G	Minimum Cost Flow	Implementation	8
H	Room Service	Geometry + DP	0
I	A Safe Bet	Data Structures	11
J	Shortest Flight Path	Implementation ?	0
K	Stacking Plates	DP	67
L	Takeover Wars	Ad-hoc <i>(cool!)</i>	16



# Our Team

1. B --- 23 min (by Masaki)
2. D --- 53 min (by Takuya)
3. K --- 75 min (by Masaki)
4. C --- 102 min (by Takuya)
5. L --- 146 min (by Kota)

**PERFECT TEAM WORK!!**

2<sup>nd</sup> place after solving L

# Our Team

However, after that...

1. I --- tried (by Takuya)
2. H --- tried (by Masaki)
3. E --- 291 min (by Takuya)  
*(After long debugging)*

# Scoreboard

Super region leader First to solve problem Solved problem Attempted problem Pending judgement

Rk	Team	Slv.	Time	A	B	C	D	E	F	G	H	I	J	K	L
1	St. Petersburg State University of IT, Mechanics and Optics	 	9	1170		1 18	1 79	2 42	2 165	2 142	1 208	2 125		1 49	1 262
2	University of Warsaw	 	9	1547	5 291	1 32	2 60	1 19	1 187	1 --	3 234	2 147		5 128	3 169
3	Moscow Institute of Physics & Technology	 	8	1131		2 18	1 215	1 70	2 73	1 167		2 291		1 104	2 113
4	Shanghai Jiao Tong University	 	7	1161		1 20	1 104	1 66	1 112	3 --		2 232		6 275	3 192
5	Belarusian State University	 	7	1281		1 32	2 90	1 52	2 260		2 198	2 290		4 219	
6	Zhongshan (Sun Yat-sen) University	 	7	1301		1 42	2 56	1 93	9 275			1 201		2 134	2 280
7	Harvard University	 	7	1319		1 128	2 205	1 93	3 75			4 297		1 155	2 226
8	The Chinese University of Hong Kong		7	1469		1 72	4 201	1 104	14 232		3 263			1 160	3 37
9	University of Waterloo		6	760		1 53	2 108	2 30	2 199		3 82	7 --		2 168	
10	Moscow State University	 	6	795		1 18	2 142	2 42	2 120		3 283	3 --		2 70	
11	University of Tokyo		6	830		1 23	2 102	2 53	5 291			2 --	12 --	1 75	2 146
12	Belarus State University of Informatics and Radioelectronics	 	6	979		1 76	1 161	1 36			1 271			2 111	4 244
13	Saratov State University	 	6	1026		1 27	1 171	1 43	4 257			6 220		2 128	26 --

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# Youtube ICPC Channel

- U Tokyo
  - <http://www.youtube.com/watch?v=dX6U-fwDJCI>
  - [http://www.youtube.com/watch?v=7JTbY\\_r-mpg](http://www.youtube.com/watch?v=7JTbY_r-mpg)
- **4** videos of U Tokyo (*out of 17*)
  - We won the ICPC *reaction* contest!?!?
- But the champion might be...
  - <http://www.youtube.com/watch?v=c71hLuG1fM>



**BTW, so many times....**

“Your team is too noisy!”

**After the Contest**

# Award



# Award





# Award





# Party



# Party



# Party



**Comments, etc...**



# Good!

- The contest itself was extremely fun!!
  - First time (& last time) to compete with other top teams from the world
  - As one of the top teams
- Rich!!
  - Hotels, shows, orchestras, ...
  - Definitely the biggest & richest programming contest



# Bad!

- Too tight schedule
  - inefficient free time to prepare & sleep well
- Too long talks from too many persons
- Too many times to applause

# About the Result

- What kinds of ability / practice necessary?
  - Japanese coders perform very well in other contests
  - Why not so in ICPC?

# Credits

- Pictures are from ICPC Digital Photo Archive
  - <http://icpc.baylor.edu/digital/photo/>