







ICPC Asia Yokohama Regional Contest 2023

Contest Program

Host: Tokyo Institute of Technology, Japan November 25–26, 2023

International Collegiate Programming Contest Asia Yokohama Regional Contest 2023

Yokohama Sanbo Hall November 25-26, 2023

Organized by - ICPC Asia Yokohama Regional Contest Organizing Committee

- International Information Science Foundation

- Tokyo Institute of Technology

Supported by – Ministry of Economy, Trade and Industry

- Ministry of Education, Culture, Sports, Science and Technology

- Ministry of Internal Affairs and Communications

- Japan Information Technology Services Industry Association (JISA)

Japan Science and Technology Agency (JST)Information Processing Society of Japan (IPSJ)

- Japan Society for Software Science and Technology (JSSST)

ICPC Global Programming

Tools Sponsor

- JetBrains

ICPC Diamond Multi-

regional Sponsor

- Huawei

Industrial Sponsorship - Google Japan G.K.

- MC Digital, Inc. - Monoxer, Inc. - e-Seikatsu Co. L

e-Seikatsu Co., Ltd.Fixstars Corporation

- GAIO TECHNOLOGY Co., Ltd.

- KLab Inc.

- LegalOn Technologies, Inc.

- OPT, Inc.

- Preferred Networks, Inc.

- Retrieva, Inc.

- UTokyo Innovation Platform Co., Ltd.

Contest Information

ICPC Asia Yokohama Regional Contest 2023
https://icpc.iisf.or.jp/2023-yokohama/regional/
ICPC Japan Site https://icpc.iisf.or.jp/

Welcome to ICPC Asia Yokohama Regional Contest!

It is a tremendous honor to welcome everyone to the ICPC Asia Yokohama Regional Contest.

This will be the second time Tokyo Institute of Technology has hosted the Asia Regional Contest. We are particularly thrilled to host the contest at the venue again, as we did last year. I am sure that all contestants are also delighted to be able to participate in the contest at the venue.

On July 7, 301 teams from 93 colleges and universities all over Japan competed in the Japan Online Contest. Although the number of teams was far less than the record 495 teams in 2019, the contest was held at a very high level. 50 teams from 34 colleges and universities advanced to this ICPC Asia Yokohama Regional Contest. 8 teams from 5 universities in the Asia-Pacific Region outside of Japan were approved to participate. They will vie for the rights to go to the World Finals.

We firmly believe that this contest will serve as an excellent platform for students to showcase the programming skills they have honed through diligent study. It is also an extraordinary opportunity for students from diverse backgrounds to engage in meaningful interaction and idea exchange.

The realization of this contest owes much to the contributions of numerous individuals. Our foremost gratitude goes to Dr. Tomoharu Ugawa and the judging team for dedicating countless hours to the preparation of the contest problems. The ICPC Board has meticulously overseen the organization of the contest. The International Information Science Foundation has adeptly managed several key tasks behind the scenes. The ICPC 'Secretaries' Team has provided top-notch technical support and service. Our heartfelt thanks also extend to all volunteer staff, including the ICPC Japanese Alumni Group and student staff from Tokyo Institute of Technology. The 12 local industrial sponsors have generously offered crucial financial support. Last but certainly not least, we extend a special thank you to all participants in the Regional Contest and those who, regrettably, could not advance.

We wish all the participants in this year's regional contest the very best of luck!

Shin-ya NISHIZAKI
Director, ICPC Asia Yokohama Regional Contest 2023
Professor, Global Scientific and Information Computing Center,
Tokyo Institute of Technology, Japann

Organizers

Director	Shin-ya Nishizaki (Tokyo Insti	tute of Technology)	
Chief Judge	Tomoharu Ugawa (The University of Tokyo)		
	Claus Aranha (University of Tsukuba)		
Organizing			
Committee	Katsuhiko Kakehi (IISF, Waseda University, ICPC Board Chair)		
Members	Hidehiko Masuhara (Tokyo Institute of Technology)		
	Yasuhiko Minamide (Tokyo Inst		
	Yoshiki Nakamura (Tokyo Instit		
	Rie Shigetomi Yamaguchi (The		
Judges Takashi Chikayama (The University of Tokyo)		rsity of Tokyo)	
	Kento Emoto (Kyushu Institute of Technology)		
	Kazuhiro Inaba (Google Japan G.K.) Kiyoshi Ishihata Shuichi Hirahara (National Institute of Informatics) Yoichi Iwata (AtCoder) Masatoshi Kitagawa (Waseda University)		
	Koichi Kubota (Chuo University) Soh Kumabe (The University of Tokyo) Mitsuru Kusumoto (Preferred Networks, Inc.) Naoki Marumo (NTT) Kiminori Matsuzaki (Kochi University of Technology) Kohei Morita (Indeed Japan) Tomohiro Oka (Google Japan G.K.) Ryotaro Sato (MC Digital, Inc.) Etsuya Shibayama (The University of Tokyo)		
	Shinya Shiroshita (Preferred N		
	Tatsuya Sumiya (MC Digital, Inc.)		
	Fumihiko Yamaguchi (University of Nagasaki)		
	Yutaro Yamaguchi (Osaka University)		
ICPC Board	Katsuhiko Kakehi (IISF, Waseda University, ICPC Board Chair)		
	Takashi Chikayama (The University of Tokyo)		
	Kiyoshi Ishihata		
	Etsuya Shibayama (The University)		
	Shingo Takada (Keio University) Rie Shigetomi Yamaguchi (The University of Tokyo)		
ICPC	Hidehiko Abe	Naoto Mizuno	
Secretaries	Yuichiro Hanada	Shohei Nishida	
Secretaries	Takuya Hashimoto	Hiroki Sato	
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	Yusuke Izumi Shinya Kawanaka	Yu Sugawara Shuhei Takahashi	
	Yoshiaki Matsuoka	Hiroshi Yamaguchi	
	Kazuma Mikami	Rie Shigetomi Yamaguchi (Secretaries Chair)	
Intomotional Infor	mation Colomos Foundation		

International Information Science Foundation

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Timetable

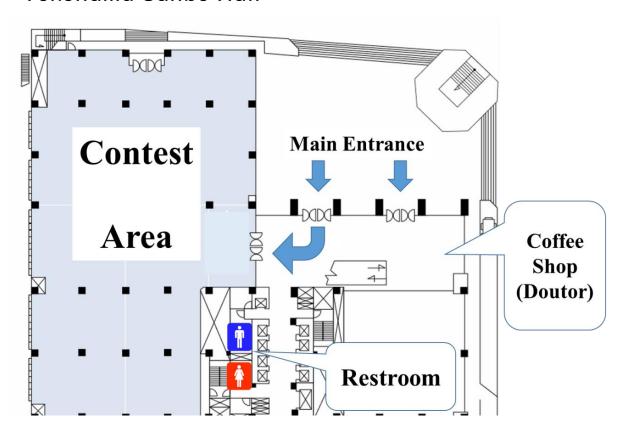
November 25 (Sat)	Yokohama Sanbo Hall (横浜産貿ホール)	
13:00 - 14:00	Registration	
14:00 - 16:30	Opening, Orientation, and Rehearsal	
16:30 - 18:00	Team Introduction	
(Dinner on your own.)		

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November 26 (Sun)	Yokohama Sanbo Hall (横浜産貿ホール)
08:40 - 09:10	Contest Check-in
09:30 - 14:30	Asia Regional Contest
	Note: There will be no room for coaches in the contest area.
	We have reserved the room on the BI floor of Workpia
	Yokohama for coaches.
15:10 - 15:50	Commentaries on Problems
15:50 - 16:40	Award and Closing Ceremony
	I. Greetings from Sponsors
	Motoki Shuhei (Huawei Technologies Japan)
	Shinji Okumura (Google Japan G.K.)
	Rei Kubonaga (MC Digital, Inc.)
	Yuya Sugie (Monoxer, Inc.)
	2. Results and Awards
	3. Closing Remarks
	Katsuhiko Kakehi (IISF)
16:40 - 18:30	Meet and Greet Sponsors
	Closing Buffet Party

Map of Area



Yokohama Sanbo Hall



Participating Teams

Team	Institution
Type-C	Chiba University
SSU	Chuo University
elephant_spaghetti	Hokkaido University
tatitsu	Hokkaido University
velocity	Hosei University
masamune	Keio University
Uribo	Kobe University
KUB I sharp	Kyoto University
Red Phobia	Kyoto University
KITKAT	Kyushu Institute of Technology
heap_q	Kyushu University
team_sadoubu	Meiji University
MuscleFlow	Nagoya University
NUCODER_A	Nagoya University
incomplete	Nara National College of Technology
NCKU-PANCAKE	National Cheng Kung University
-03	National Institute of Technology, Kagawa College
mos	National Institute of Technology, Matsue College
Waiting for Judging	National Institute of Technology, Toyota College
NTNU_NTDL	National Taiwan Normal University
GenshinStartKleePlayer	National Taiwan University
PCkomachi	National Taiwan University
DanielEatNuclearWrapEgg	National Tsing Hua University
LinkCutTreap	National Tsing Hua University
NatsunoHanagaSakuYoihi	National Tsing Hua University
NYCU_FriedShrimp	National Yang Ming Chiao Tung University
Randomers	Osaka Metropolitan University
kotamanegi_marunage	Osaka University
kotamanegi_mijingiri	Osaka University
KSS908111314	Osaka University
sendai.cs	Senshu University
corbeau	Shibaura Institute of Technology
coconut milk	Shiga University
rHAPsody	Shizuoka University
3ninn_orannwa_boke	Sophia University
MCF	The University of Electro-Communications

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DELIAIR	The University of Tokyo
RecEight	The University of Tokyo
Speed Star	The University of Tokyo
SPJ	The University of Tokyo
The Raspberry Candies	The University of Tokyo
Aobayama_doctors	Tohoku University
Aobayama_primes	Tohoku University
Algorithmical	Tokuyama College of Technology
acidrain	Tokyo Institute of Technology
AMATSUKAZE	Tokyo Institute of Technology
Bocchi The Tech	Tokyo Institute of Technology
tonosama	Tokyo Institute of Technology
triC_Hino	Tokyo Metropolitan University
Bakushin O	Tokyo National College of Technology
sankaKsu	Tokyo University of Agriculture and Technology
TUTankhamun	Toyohashi University of Technology
aizu_d	University of Aizu
LuzhiledFanClub	University of Aizu
Big O of N cubed	University of Tsukuba
GoodBye2023	University of Tsukuba
hot-k-k	Waseda University
KKT89	Waseda University