



icpc International Collegiate Programming Contest

ICPC FACT SHEET – 20 Jul. 2020

The 44th Annual World Finals of the ICPC International Collegiate Programming Contest

Hosted by Moscow Institute of Physics and Technology (MIPT)
Moscow, Russian Federation, 19 - 24 June, 2021

About the Contest – [icpc.global](#)

The ICPC International Collegiate Programming Contest is the premiere global programming competition conducted by and for the world's universities. The ICPC is affiliated with the ICPC Foundation, enjoys the auspices of the ICPC Foundation, and is headquartered at Baylor University. For over four decades, the ICPC has grown to be a game-changing global competitive educational program that has raised aspirations and performance of generations of the world's problem solvers in the computing sciences and engineering.

In ICPC competitions, teams of three students represent their university in multiple levels of regional competition. Volunteer coaches prepare their teams with intense training and instruction in algorithms, programming, and teamwork strategy. Several ICPC universities and ICPC volunteers provide online judging systems to all free of charge. Top teams from regional competition advance to the final round. This year's regional competitions will advance teams to the World Championship round - the 2020 ICPC World Finals hosted by Moscow Institute of Physics and Technology (MIPT) – which will be conducted on 23 June, 2021 in Moscow, Russian Federation.

The ICPC traces its roots to a competition held at Texas A&M in 1970 hosted by the Alpha Chapter of the UPE Computer Science Honor Society. The idea quickly gained popularity within the United States and Canada as an innovative initiative to raise the aspirations, performance, and opportunity of the top students in the emerging field of computer science.

The contest evolved into a multi-tier competition with the first Finals held at the ACM Computer Science Conference in 1977. Operating under the auspices of the ICPC Foundation and headquartered at Baylor University since 1989, the contest has expanded into a global network of universities hosting regional competitions that advance teams to the ICPC World Finals.

In the past 20 years alone, ICPC participation has increased by more than 2000%. Last year, ICPC Regional participation included 58,963 of the finest students and faculty in computing disciplines from 3,406 universities in 104 countries on six continents.

The contest fosters creativity, teamwork, and innovation in building new software programs, and enables students to test their ability to perform under pressure. Quite simply, it is the oldest, largest, and most prestigious programming contest in the world.

The annual event is comprised of several levels of competition:

- Local Contests – Universities choose teams or hold local contests to select one or more teams to represent them at the next level of competition. Selection takes place from a field of over 300,000 students in computing disciplines worldwide.
- Regional Contests – In last year's regionals, 58,963 contestants from 3,406 universities in 104 countries on six continents competed at over 643 sites to advance to the World Finals.
- World Finals 19 - 24 June, 2021 in Moscow, Russian Federation– Hosted by Moscow Institute of Physics and Technology (MIPT), the World Finalist teams will compete for awards, prizes, and bragging rights. These teams represent the best of great universities on six continents - the cream of the crop.

Battle of the Brains

The contest pits teams of three university students against eight or more complex, real-world problems, with a grueling five-hour deadline. Huddled around a single computer, competitors race against the clock in a battle of logic, strategy, and mental endurance.

Teammates collaborate to rank the difficulty of the problems, deduce the requirements, design test beds, and build software systems that solve the problems under the intense scrutiny of expert judges. For a well-versed computer science student, some of the problems require precision only. Others require a knowledge and understanding of advanced algorithms. Still others are simply too hard to solve – except, of course, for the world’s brightest problem-solvers.

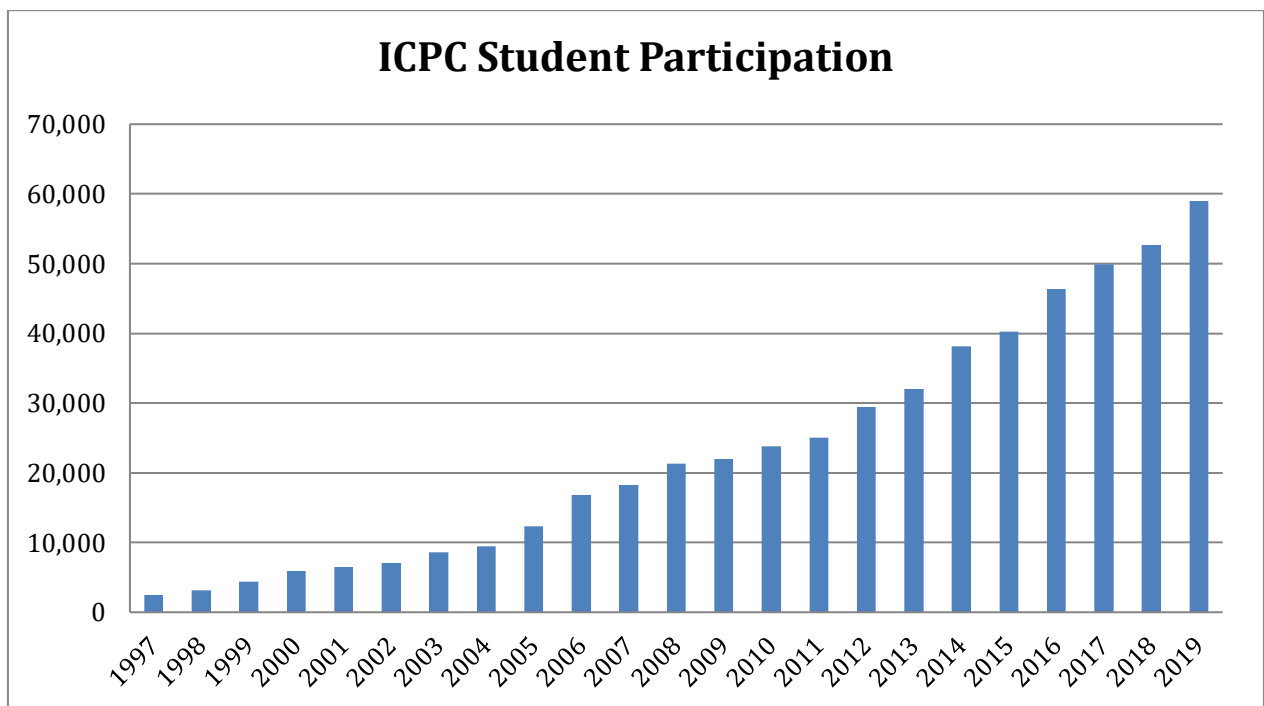
Judging is relentlessly strict. The students are given a problem statement – not a requirements document. They are given an example of test data, but they do not have access to the judges’ test data and acceptance criteria. Each incorrect solution submitted is assessed a time penalty. You don’t want to waste your customer’s time when you are dealing with the supreme court of computing. The team that solves the most problems in the fewest attempts in the least cumulative time is declared the winner.

To learn more about the ICPC, please visit icpc.global

For full coverage of the World Finals including social media, photos, video, live coverage, and live scoreboard, go to ICPCNews, icpcnews.com.

Contest Growth

The ICPC Foundation, UPE, and Baylor University are thrilled that the contest continues to attract the best and brightest students from around the world. This year 58,963 contestants from 3,406 universities in 104 countries competed in regional competitions at over 643 sites worldwide. The ICPC student participation has increased by 20X in 20 years. For more information on previous contests, and last year’s final standings and problem sets, please see icpc.global.



World Finals 2020 hosted in Moscow, Russian Federation – the final round following the 2019 Regionals

Teams from regional contests servicing universities worldwide will advance to the World Finals to be held in Moscow, Russian Federation, 19 - 24 June, 2021. The 2020 World Finals is hosted by Moscow Institute of Physics and Technology (MIPT).

Recent medal winners in order of finish are:

- 2019 Gold Moscow State University
Massachusetts Institute of Technology
The University of Tokyo
University of Warsaw
- Silver National Taiwan University
University of Wroclaw
Seoul National University
KimChaek University of Technology
- Bronze Sharif University of Technology
Moscow Institute of Physics & Technology
National Research University Higher School of Economics
The Chinese University of Hong Kong
- 2018 Gold Moscow State University
Moscow Institute of Physics & Technology
Peking University
The University of Tokyo
- Silver Seoul National University
University of New South Wales
Tsinghua University
Shanghai Jiao Tong University
- Bronze St. Petersburg ITMO University
University of Central Florida
Massachusetts Institute of Technology
Vilnius University
Ural Federal University
- 2017 Gold St. Petersburg ITMO University
University of Warsaw
Seoul National University
St. Petersburg State University
- Silver Moscow Institute of Physics & Technology
Tsinghua University
Peking University
Fudan University
- Bronze KAIST
Ural Federal University
KTH - Royal Institute of Technology
The University of Tokyo
- 2016 Gold St. Petersburg State University
Shanghai Jiao Tong University
Harvard University
Moscow Institute of Physics & Technology

About the ICPC Foundation

The ICPC Foundation is a 501(c)(3) organization founded to advance the art and sport of competitive programming for the benefit of society. The foundation is responsible for ICPC sponsorship, fundraising, outreach, and operational matters. The ICPC Foundation strives to provide ample opportunity for the underserved, to create a tier of regional championships to recognize far more star performers and showcase emerging talent, and to bring ICPC alumni together, assuring future generations paths of excellence to being great problem solvers. The ICPC Foundation is actively engaged in creating equal opportunities for women or other underrepresented groups to pursue excellence within a culture of global inclusion and authenticity. For more information about the ICPC and the ICPC Foundation visit [icpc foundation](#).

About the Moscow Institute of Physics & Technology

The Moscow Institute of Physics and Technology (MIPT) is one of the country's leading universities and an important hub for innovative research. MIPT's mission is to train leaders able to tackle pressing scientific and technological issues, educating those who will shape the success of the nation and humanity in the 21st century.

The reason for the success of MIPT largely has to do with the ideas of the Institute's founding fathers, the three Nobel Laureates: Pyotr Kapitsa, Lev Landau, and Nikolay Semenov. MIPT trains highly skilled professionals in the fields of fundamental and applied physics, mathematics, computer science and technology, chemistry, biology, and other natural and engineering sciences.

Among other areas at the focus of the Institute's research are aging and age-related diseases, applied and fundamental physics, 2D materials, quantum technology, artificial intelligence, genomic engineering, Arctic and space technologies. For more information, visit [eng_mipt.ru](#).

About the City of Moscow

Moscow is the largest megacity in Europe with a population of over 12.5 million people. The city was founded in 1147 and named after the river flowing through it. Today Moscow is a modern metropolis rich in history, and the hub of Russia's scientific and innovative development.

Moscow is in the TOP-50 student cities in the world according to the prestigious QS World University Rankings and ranks third among major cities worldwide for its availability of free public Wi-Fi hotspots. In 2019 Moscow beat other world cities to be recognized as the best tourist destination according to the prestigious World Travel Awards.

Baylor University's Commitment

Baylor University has been the home of the ICPC since the late 1980s, where it has been managed under the direction of Executive Director and Professor, Dr. William Poucher, with global enterprise technology development headed by Dr. Jeff Donahoo, Deputy Executive Director. The ICPC contributes to Baylor's global mission to encourage the next generation to develop and apply their problem-solving talents to the challenges that face the world today and the world to come. Chartered by the Republic of Texas, Baylor is the oldest institution of higher learning in the State of Texas. You may find more about Baylor at [baylor.edu](#).

Upsilon Pi Epsilon's Commitment

The Upsilon Pi Epsilon International Computer Science Honor Society recognizes the best students of computer science and engineering in the world. Since its earliest participation, the UPE has provided support and scholarships to the World Finals teams. The UPE boasts the longest continuous relationship to the ICPC, dating back to 1970 with the first event held at Texas A&M by members of the Alpha Chapter of the UPE. For more information about other UPE activities, its chapters, and its membership click on [upe.acm.org](#).