



ICPC FACT SHEET

The 2023 ICPC World Finals The 46th and 47th Annual World Championships of the ICPC International Collegiate Programming Contest Luxor, Egypt 14-19 April 2024

hosted by

The Arab Academy for Science, Technology, & Maritime Transport (AASTMT)

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 operates under the auspices of the ICPC Foundation, which hosts ICPC Global Headquarters. We spotlight the students, coaches, universities, industry, and communities working to advance prospects of prosperity through team-based, algorithmic, competitive programming.

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. With over 400,000 alumni, the ICPC community spans the globe. Recent ICPC Regional Contests have served 75,000 volunteers, coaches, and team members from 3,450 universities in 111 countries.

The ICPC community purpose remains at the heart of the ICPC: to advance prospects for the next generation by bringing students together, working collaboratively to solve algorithmically challenging problems, and preparing them to build dependable systems that benefit their neighbors with the support of universities, industry, and community leaders, globally. With ICPC principles, "*Put people first.*"; "*Practice goodwill.*" and "*Follow the Golden Rule.*", the doors are open for students from all universities to compete in ICPC regional competitions with the opportunity to advance to the ICPC World Finals. See the [ICPC Code of Ethics](#).

ICPC World Finals host institutions that offer hospitality comparable to visiting grandma's house with special assistance to obtain passports and visas so that all who qualify may participate. The 46th and 47th ICPC World Finals in Luxor, hosted by The Arab Academy for Science, Technology, & Maritime Transport (AASTMT), will continue over four decades of global inclusion, advancing participants of any race, ethnicity, gender, religion, or nationality who qualify. The ICPC's purpose remains to uplift each generation on the path of excellence to build systems that benefit their communities together globally.

In ICPC competitions, teams of three students represent their universities 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 free of charge. Top teams from regional competitions held on six continents advance to not one but two annual ICPC World Championship rounds of the ICPC World Finals, hosted by AASTMT on April 18, 2024, in Luxor, Egypt.

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 from 1989 to 2021, the contest has expanded into a global network of universities hosting regional competitions that advance teams to the ICPC World Finals.

The contest fosters creativity, teamwork, and innovation in building new software programs and enables students to test their ability to perform under pressure. It is the world's oldest, largest, and most prestigious programming contest and the root of competitive programming competitions.

The annual event comprises 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 over 300,000 students in computing disciplines worldwide.
- Recent ICPC Regional Contests have served 75,000 volunteers, coaches, and team members from 3,450 universities in 111 countries.
- World Finals – April 14-19, 2024, in Luxor, Egypt – Hosted by the Arab Academy for Science, Technology, & Maritime Transport (AASTMT), the ICPC World Finalist teams for two seasons will compete for World Championship 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 problems only require precision. Others require knowledge and understanding of advanced algorithms. Still, others are simply too hard to solve – except 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 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 complete coverage of the World Finals, including social media, photos, video, live coverage, and live scoreboard, go to ICPCNews, news.icpc.global.

Contest Growth

The ICPC Foundation and UPE are thrilled that the contest continues to attract the best and brightest students worldwide. The ICPC student participation has increased by 2000% in 25 years. For more information on previous contests and last year's final standings and problem sets, please see icpc.global.

The 2023 ICPC World Finals in Luxor, Egypt, will host the 46th and 47th ICPC World Championships, the final rounds for the 2021-22 and 2022-23 ICPC Regionals.

Teams from regional contests servicing universities worldwide will advance to the annual World Championship Round of the ICPC World Finals hosted by AASTMT to be held in Luxor, Egypt, April 14-19, 2024. This will be the

largest World Finals ever since it provides for two years of ICPC competition completed during the pandemic.

Recent medal winners in order of finish are:

<p>2021 Gold (45th ICPC World Finals Dhaka) Massachusetts Institute of Technology Peking University The University of Tokyo Seoul National University</p> <p>2021 Silver ETH Zürich École Normale Supérieure de Paris Carnegie Mellon University University of Warsaw</p> <p>2021 Bronze National Research University Higher School of Economics St. Petersburg State University University of Oxford University of Engineering and Technology - VNU</p>	<p>2020 Gold (44th ICPC World Finals Moscow) Nizhny Novgorod State University Seoul National University St. Petersburg ITMO University Moscow Institute of Physics and Technology</p> <p>2020 Silver University of Wrocław University of Cambridge Belarusian State University University of Bucharest</p> <p>2020 Bronze Massachusetts Institute of Technology Kharkiv National University of Radio Electronics University of Illinois at Urbana-Champaign National Research University Higher School of Economics</p>
<p>2019 Gold (43rd ICPC World Finals Porto) Moscow State University Massachusetts Institute of Technology The University of Tokyo University of Warsaw</p> <p>2019 Silver National Taiwan University University of Wrocław Seoul National University KimChaek University of Technology</p> <p>2019 Bronze Sharif University of Technology Moscow Institute of Physics & Technology National Research University Higher School of Economics The Chinese University of Hong Kong</p>	<p>2018 Gold (42nd ICPC World Finals Beijing) Moscow State University Moscow Institute of Physics & Technology Peking University The University of Tokyo</p> <p>2018 Silver Seoul National University University of New South Wales Tsinghua University Shanghai Jiao Tong University</p> <p>2018 Bronze St. Petersburg ITMO University University of Central Florida Massachusetts Institute of Technology Vilnius University Ural Federal University</p>

About the ICPC Foundation

The ICPC Foundation is a 501(c)(3) organization founded to advance the art, sport, and science of competitive programming for the benefit of society. The ICPC International Collegiate Programming Contest operates under the ICPC Foundation and is responsible for 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 operates programs such as ICPC-U and the ICPC University Commons, which actively create opportunities, especially for the underserved, to pursue excellence within a culture of global inclusion and authenticity. For more information about the ICPC and the ICPC Foundation, visit icpc.foundation.

Institutional Sponsor Upsilon Pi Epsilon’s Commitment

The Upsilon Pi Epsilon International Computer Science Honor Society recognizes the best computer science and engineering students 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 with 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, chapters, and membership, click upe.acm.org.

About Egypt

Egypt, officially known as the Arab Republic of Egypt, has a rich history that dates back to ancient times. Egypt is known for its world-renowned pyramids, temples, and tombs, as well as its ancient civilization that flourished along the banks of the Nile River.

Egypt's capital and largest city is Cairo, home to over 20 million people. Other major cities in Egypt include Alexandria, Giza, and Luxor. Luxor is both a resort and a center for international and diplomatic meetings. The official language is Arabic, but many Egyptians speak English and French.

Egypt has a diverse economy driven by tourism, agriculture, and manufacturing. It is one of the world's largest cotton producers and is also known for its oil and gas production. Egypt is a member of the United Nations, the Arab League, and the African Union.

Universities in Egypt are heavily engaged in the ICPC. The 2022 ICPC Egypt Collegiate Programming Contest, hosted by AASTMT, featured 2,500 university teams competing to advance to the ICPC Africa and Arab Region championship, the ACPC Championship, which advances to the ICPC World Finals.

About Luxor

Luxor is a world-famous city on southern Egypt's beautiful Nile River's east bank. It's on the site of ancient Thebes, the pharaohs' capital at the height of their power during the 16th–11th centuries B.C. Luxor surrounds two enormous ancient monuments, the historic Luxor Temple and the majestic Karnak Temple. The royal tombs of the Valley of the Kings and the Valley of the Queens are on the river's west bank. Luxor is the capital of the Luxor Governate and is widely known as the "world's largest open-air museum," attracting millions of visitors worldwide.

About the World Finals Host University - The Arab Academy for Science, Technology, & Maritime Transport

AASTMT, one of the organizations of the Arab League, was built with the sole purpose of empowering future Arab youths with technology skills and knowledge to create a better tomorrow. For the last 15 years, AASTMT has accepted the responsibility of hosting the ICPC Africa and Arab Region Headquarters and ensuring the support and continuity of ICPC events. Team participation has grown 100 times during this period, with university participation now spanning the countries throughout the multi-continental region. Under the auspices of AASTMT, ICPC's Africa and Arab Collegiate Programming Championship ("ACPC") has seen a significant rise in government support, including from Ministries of Telecommunications, Education, and Tourism in many countries throughout the multi-continental region. These partners have made it possible for the ACPC to scale and uplift emerging talent to performance levels essential to meet the needs of their communities, large and small.