



ICPC FACT SHEET – 28 July 2022

**The 45th Annual World Finals of the
ICPC International Collegiate Programming Contest**

**Hosted by University of Asia Pacific (UAP)
Dhaka, Bangladesh - 6-11 November 2022**

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 shine the spotlight on 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 400,000 alumni, The ICPC community spans the globe with recent annual participation levels reaching 111 countries, 3,450 universities, and 75,000 team members, coaches and volunteers.

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, 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 offer hospitality comparable to visiting grandma’s house with special assistance to obtain passports and visas so that all who qualify may participate. The 45th ICPC World Finals in Dhaka, hosted by the University of Asia Pacific, will continue over four decades of global inclusion advancing participants of any race, ethnicity, gender, religion, or nationality who qualify.

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 the ICPC World Championship round of the ICPC World Finals, hosted by University of Asia Pacific (UAP) on 10 November, 2022, in Dhaka, Bangladesh.

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 25 years alone, ICPC participation has increased by more than 2000%.

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 and the root of competitive programming competitions the world over.

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 – Annually, ICPC Regional Contests include participants from 111 countries, with 3,450 universities, 75,000 volunteers, coaches, and team members involved.
- World Finals – November 6-11, 2022 in Dhaka, Bangladesh – Hosted by University of Asia Pacific (UAP), the ICPC 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, news.icpc.global.

Contest Growth

The ICPC Foundation and UPE are thrilled that the contest continues to attract the best and brightest students from around the world. 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.

ICPC World Finals Dhaka hosted in Dhaka, Bangladesh– the final round following the 2020-21 Regionals.

Teams from regional contests servicing universities worldwide will advance to the World Championship Round of the ICPC World Finals hosted by University of Asia Pacific to be held in Dhaka, Bangladesh, 6-11 November, 2022. Recent medal winners in order of finish are:

<p>2020 Gold Nizhny Novgorod State University Seoul National University St. Petersburg ITMO University Moscow Institute of Physics and Technology</p> <p>2020 Silver University of Wroclaw 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>
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<p>2019 Gold Moscow State University Massachusetts Institute of Technology The University of Tokyo University of Warsaw</p> <p>2019 Silver National Taiwan University University of Wroclaw 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 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 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.

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.

About the World Finals Host Country

Bangladesh, a country of South Asia, located in the delta of the Padma (Ganges) and Jamuna (Brahmaputra) rivers in the northeastern part of the Indian subcontinent. Civilization in the Bengal delta dates back more than 4,300 years. The borders of present-day Bangladesh were established during the British partition of Bengal and India in 1947 when the region became East Pakistan, part of the newly formed state of Pakistan. It was separated from West Pakistan by 1,600 km of Indian territory. Due to a desire for political, economic, and linguistic self-determination, popular agitation and civil disobedience grew against the Pakistani state. This culminated in the Bangladesh Liberation War of 1971. The People's Republic of Bangladesh was founded as a constitutional, secular, democratic, multiparty, parliamentary republic. The Bangladesh story is about a man named Sheikh Mujibur Rahman who sacrificed his life for a country he had named "Bangladesh."

Bangladesh has an impressive track record of growth and poverty reduction. It has been among the fastest growing economies in the world over the past decade, supported by a demographic dividend, strong ready-made garment (RMG) exports, and stable macroeconomic conditions. Continued recovery in exports and consumption will help

growth rates pick up to 6.4 percent in the fiscal year 2021-22. Bangladesh tells the world a remarkable story of poverty reduction and development. From being one of the poorest nations at birth in 1971, with per capita GDP tenth lowest in the world, Bangladesh reached a lower-middle-income status in 2015. It is on track to graduate from the UN's Least Developed Countries (LDC) list in 2026.

Bangladesh is home to the world's largest river delta, roaming Bengal tigers in the Sundarbans, a mangrove and swampland in the delta, the longest natural uninterrupted sea beach in Asia (Cox's Bazar beach), which is 150 km long, the Malnicherra Tea Estate, the oldest tea garden in the subcontinent, ancient historical Panam City, Ilish fish and Muslin gauze like Jamdani.

About the World Finals Host City

Dhaka is Bangladesh's capital and largest city. It is the largest city by population in the historical region of Bengal and a major city in South Asia. It is a hub for trade and culture, with a long history as a Bengali capital. It has been called the City of Mosques and the Venice of the East due to its Islamic architecture and a riverfront facing the Buriganga River. It is also known as the Rickshaw Capital of the World, as there are over 500,000 cycle rickshaws running on its roads.

As the center of Bangladesh's independence movements, Dhaka also hosts some significant national monuments and structures. A number of annual cultural events are held in Dhaka, like Pohela Falgun, Pohela Baishakh, and Ekushe Book Fair, which add a unique flavor to the city.

About the World Finals Host University

University of Asia Pacific (UAP) in 1996 by the UAP Foundation. UAP is ranked 5th among private universities and 19th among all public and private universities in Bangladesh in the Scimago Institution Ranking (SIR), 2021. UAP is ranked 11th in Computer Science, 12th in Energy, and 12th in Engineering among all public and private universities in Bangladesh (SIR 2021). At present, UAP offers eight undergraduate and ten graduate programs. All the programs of UAP are accredited by the professional bodies of Bangladesh, such as the Institute of Architects Bangladesh (IAB), Institution of Engineers Bangladesh (IEB), Bangladesh Bar Council, Pharmacy Council of Bangladesh, etc. UAP has a total of 5208 registered students and 278 academic staff. UAP has a renowned academic staff like Prof. Dr. Abdul Matin Patwari, Professor Emeritus, and Prof. Dr. M. Shamim Z. Bosunia, Professor Emeritus. National Professor Dr. Jamilur Reza Choudhury, an internationally acclaimed engineer, and academician, was the Vice Chancellor of UAP.

About the World Finals Host Entities

ICT Division was established to lead the digitalization initiatives in Bangladesh. Since its establishment, the ICT Division has taken various initiatives to create digital opportunities for the citizen and industry, drive e-government activities, promote the IT industry, and liaise with international stakeholders. In recent years, leading innovation in ICT and developing startup culture have become important areas of intervention. ICT Division facilitates hi-tech industries and investment in the country through networking and partnership with local and global stakeholders.

Bangladesh Computer Council (BCC) is a pioneer in realizing the ICT agenda of the Government of Bangladesh. It started its journey in the early 90s. From 2009, BCC played a crucial role in learning Digital Bangladesh, the vision that led the nation to embrace information technology aggressively. It builds IT infrastructures, develops IT human resources, and ensures hardware and software quality in the country. BCC hosts a Tier-III data center, and at the same time, it operates the most extensive public network in Bangladesh, connecting 18400+ Government offices. It also strengthens IT industries by promoting creativity, innovation, and capacity building.