



FACT SHEET –8th Edition – 7 January 2010

The ACM International Collegiate Programming Contest sponsored by IBM and hosted by HEU - Harbin Engineering University

About the Contest

The ACM International Collegiate Programming Contest (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 ACM 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 ACM-ICPC World Finals.

Since IBM became sponsor in 1997, the contest has increased over 800%. Participation has grown to involve twenty-two thousand of the finest students and faculty in computing disciplines from over 1,931 universities from 82 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* (September to November 2009) – This past year, nearly 22,000 contestants from 1,931 universities from 82 countries on six continents competed at 242 sites.
- *World Finals* (February 1-6, 2010, Harbin, China) –One hundred three (103) world finalist teams will compete for awards, prizes and bragging rights in Harbin hosted by Harbin Engineering University. These teams represent the best of the 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.

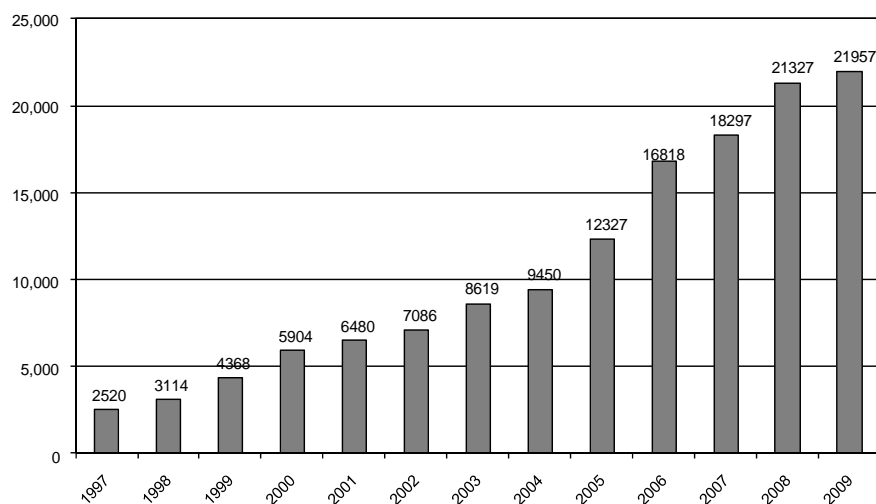
Judging is relentlessly strict. The students are given a problem statement – not a requirements document. They are given an example of test data, but they do not have access to the judges’ test data and acceptance criteria. Each incorrect solution submitted is assessed a time penalty. You don’t want 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 <http://acmicpc.org> or <http://icpc.baylor.edu/>. Visit the ICPC podcast series at <http://battleofthebrains.podbean.com> for insights from past contestants and current IBM executives.

Contest Growth

ACM, IBM, UPE, and Baylor University are thrilled that the contest continues to attract the best and brightest students from around the world with nearly 22,000 contestants from 1,931 universities in 82 countries competing this year. Since the beginning of IBM’s sponsorship in 1997, participation has increased over 800%. For more information on previous contests, and last year’s final standings and problem sets, please see <http://icpc.baylor.edu/> or <http://www.ibm.com/university/acmcontest/>.

ACM-ICPC Student Participation



World Finals 2010 – the final round for the 2009 Regionals

One hundred three (103) teams from regional contests servicing universities worldwide will qualify to advance to the World Finals to be held in Harbin, China, February 1-6, 2010. The World Finals is hosted by Harbin Engineering University. Recent medal winners in order of finish are:

- 2009 Gold: St. Petersburg University of Information Technology, Mechanics & Optics (Russia)
Tsinghua University (China)
St. Petersburg State University (Russia)
Saratov State University (Russia)
- 2008 Gold: St. Petersburg University of Information Technology, Mechanics & Optics (Russia)
Massachusetts Institute of Technology (U. S. A.)
Izhevsk State Technical University (Russia)
Lviv National University (Ukraine)
- 2007 Gold: Warsaw University (Poland)
Tsinghua University (China)
St. Petersburg University of Information Technology, Mechanics & Optics (Russia)
Massachusetts Institute of Technology (U. S. A.)

About ACM

The Association for Computing Machinery (ACM) is a major force in advancing the skills of information technology professionals and students. ACM serves its global membership of 80,000 by delivering cutting edge technical information and transferring ideas from theory to practice. ACM hosts the computing industry’s leading Portal to Computing Literature. With its journals and magazines, special interest groups, conferences,

workshops, electronic forums, Career Resource Centre and Professional Development Centre, ACM is a primary resource to the information technology field. For more information, see <http://www.acm.org> .

About IBM

IBM believes intelligence will change more aspects of human life, including the way people live, work, and govern themselves; the way services are ordered and delivered; and the way air, water and forests are protected. The world is already connected economically, technically and socially. However, being connected alone is not sufficient. The world needs new generations of talent, problem solvers and leaders to infuse intelligence into our life such as power grids, transportation, and food safety.

IBM is the world's largest information technology and service provider. IBM has 30,000 software engineers in more than 80 research and development laboratories around the globe, who focus on solving real-world business issues for customers in more than 170 countries. IBM offers software services and dynamic infrastructure for customers to manage their systems, processes and applications across standard platforms. IBM has customers in industries such as telecommunications, utility, retail, public service, health care, education, transportation, finance, insurance, petroleum, manufacturing, etc. IBM explores new services using technology such as Web 2.0, virtualization, social networking, RFID, and cloud computing for new enterprise data centers. For more information, visit <http://www.ibm.com/software>.

IBM's Commitment

IBM's sponsorship commitment to the ACM International Collegiate Programming Contest is part of a company-wide effort to advance the next generation of technology leaders and problem solvers who have combined skills of computing science and business management. For more information, visit <http://www.ibm.com/university/acmcontest/>

Harbin Engineering University's Commitment

HEU is pleased to host the 2010 World Finals during our International Snow and Ice Festival. From point of arrival, to our finest hotels, to our spacious university campus, or to the Festival, we are committed to provide the finest of hospitalities to the 2010 World Finals. HEU is pleased to host the World Finals at our new library building. For more on HEU, visit <http://english.hrbeu.edu.cn/>

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 B. Poucher. 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 <http://www.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: <http://www.acm.org/upe/> .

The 2010 ACM-ICPC World Finals List by Regions (In alphabetical order by region)

Africa and the Middle East

Faculty of Computers and Information, Cairo University	Egypt
The British University in Egypt	Egypt
American University of Beirut	Lebanon
University of Cape Town	South Africa

Asia

Bangladesh University of Engineering and Technology	Bangladesh
Beijing Jiaotong University	China
Beijing University of Posts and Telecommunications	China
Fudan University	China
Fuzhou University	China
Guangdong University of Technology	China
Hangzhou Dianzi University	China
Harbin Engineering University	China
Harbin Institute of Technology	China
National University of Defense Technology	China
Peking University	China
Shanghai Jiaotong University	China
South China Agricultural University	China
Southeast University	China
Tsinghua University	China
University of Electronic Science and Technology of China	China
Wuhan University	China
Xidian University	China
Zhejiang University	China
Zhejiang University of Technology	China
Zhongshan (Sun Yat-sen) University	China
Chinese University of Hong Kong	Hong Kong
DJ Sanghvi College of Engineering	India
International Institute of Information Technology - Hyderabad	India
National Institute of Technology, Trichy	India
Amirkabir University of Technology	Iran
Sharif University of Technology	Iran
Kyoto University	Japan
University of Tokyo	Japan
KAIST	Korea, Republic of
Seoul National University	Korea, Republic of
Sogang University	Korea, Republic of
University of the Philippines - Diliman	Philippines
National University of Singapore	Singapore
National Chiao Tung University	Taiwan
National Taiwan University	Taiwan
Ho Chi Minh City University of Science	Vietnam

Europe & the Russian Federation

Belarusian State University	Belarus
Friedrich-Alexander-University Erlangen-Nuremberg	Germany
Universitat Politècnica de Catalunya	Spain
University of Helsinki	Finland
École Normale Supérieure ULM	France
University of Warsaw	Poland
University of Wrocław	Poland
Izhevsk State Technical University	Russian Federation
Moscow State University	Russian Federation
Novosibirsk State University	Russian Federation
Petrozavodsk State University	Russian Federation
Samara State Aerospace University	Russian Federation
Saratov State University	Russian Federation
St. Petersburg State University	Russian Federation
St. Petersburg State University of IT, Mechanics and Optics	Russian Federation
State University - Higher School of Economics	Russian Federation
Ufa State Technical University of Aviation	Russian Federation
Ural State University	Russian Federation
KTH - Royal Institute of Technology	Sweden
National Technical University "Kharkiv Polytechnic Institute"	Ukraine
Taras Shevchenko Kiev National University	Ukraine

Latin America

Facultad de Matemática - Astronomía y Física (UNC)	Argentina
Universidad de Buenos Aires - FCEN	Argentina
Universidad Nacional de La Plata	Argentina
Institute of Computing - University of Campinas	Brazil
Instituto de Matemática e Estatística da Universidade de São Paulo	Brazil
Instituto Tecnológico de Aeronáutica	Brazil
Pontificia Universidade Católica do Rio de Janeiro	Brazil
Universidade Federal de Pernambuco	Brazil
Universidade Federal de Santa Catarina	Brazil
Universidade Federal de Sergipe	Brazil
Universidad de los Andes	Colombia
Universidad Central Marta Abreu de las Villas	Cuba
ITESM Campus Queretaro	Mexico
Universidad de Guanajuato	Mexico
Universidad Simón Bolívar	Venezuela

North America

University of Alberta	Canada
University of British Columbia	Canada
University of Waterloo	Canada
Carnegie Mellon University	United States
Columbia University	United States
Cornell University	United States
Duke University	United States
Florida Institute of Technology	United States
Harvey Mudd College	United States
Massachusetts Institute of Technology	United States
Northwestern College	United States
Stanford University	United States
The University of Texas at Austin	United States
University of Central Florida	United States
University of Chicago	United States
University of Illinois - Urbana-Champaign	United States
University of Kentucky	United States
University of Maryland	United States
University of Michigan at Ann Arbor	United States
University of Nebraska - Lincoln	United States
University of North Texas	United States
University of Rochester	United States
University of Virginia	United States
University of Wisconsin - Madison	United States

South Pacific

The University of Western Australia	Australia
University of Canterbury	New Zealand