

The ACM INTERNATIONAL COLLEGIATE PROGRAMMING CONTEST
sponsored by IBM **hosted by the University of Alberta “100 Years”**

FACT SHEET – 29 JAN 2008 – Sixth Edition – World Finals at Banff Springs

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 challenge 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 by a factor of eight (8X). Participation has grown to involve several tens of thousands of the finest students and faculty in computing disciplines at 1,821 universities from 83 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 December 2007) – This year, participation increased by 10% from 6,099 to 6,700 teams representing 1,821 universities from 83 countries on six continents, not counting numerous teams competing in preliminaries.
- *World Finals* (April 6-10, 2008, Fairmont Banff Springs, Alberta) – To celebrate the 100th Centenary of host the University of Alberta, one hundred (100) world finalist teams will compete for awards, prizes and bragging rights. These teams represent the best of the finest 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.

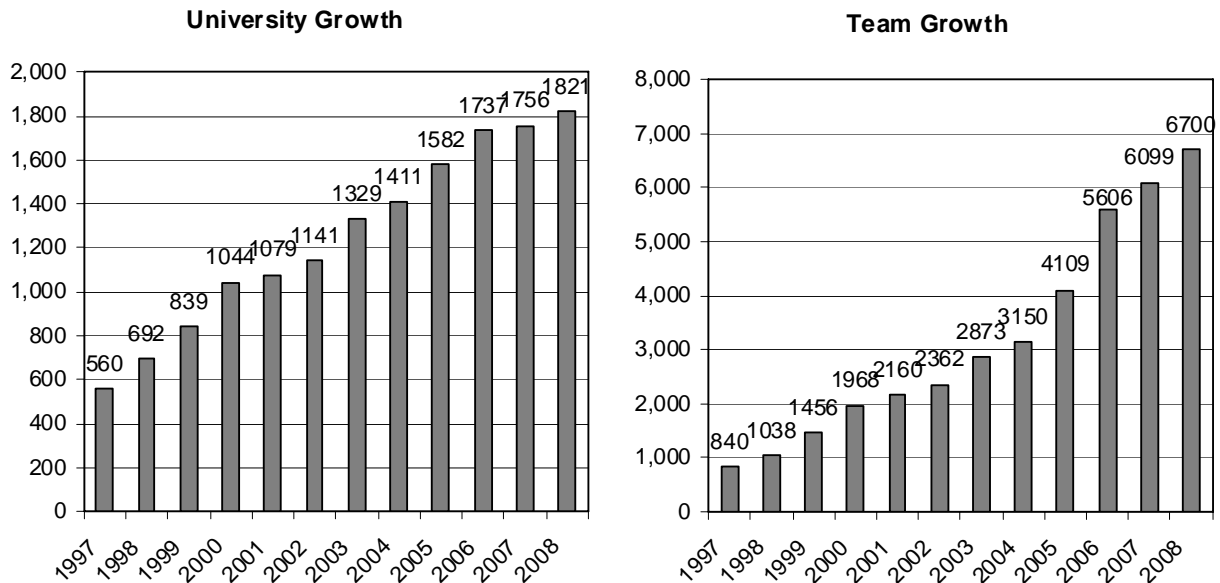
Judging is relentlessly strict. The students are given a problem statement – not a requirements document. They are given an example of test data, but they do not have access to the judges’ test data

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/>.

Contest Growth

ACM, IBM, and Baylor University are thrilled that the contest continues to attract the best and brightest students from around the world, with tens of thousands of participants on 6,700 teams representing 1,821 universities in 82 countries. Since the beginning of IBM's sponsorship in 1997, participation has increased by a factor of eight. For more information on previous contests, and last year's final standings and problem sets, please see <http://icpc.baylor.edu/past/> or <http://www.software.ibm.com/acm>.



World Finals 2008 – the final round for the 2007 Regionals

One hundred (100) teams from regional contests servicing universities world-wide will qualify to advance to the World Finals to be held at the Fairmont Banff Springs Hotel, Alberta, Canada, April 6-10, 2008. The World Finals is hosted by the University of Alberta that is celebrating its 100th anniversary. Recent medal winners in order of finish are:

- 2007 Gold: Warsaw University (Warsaw, Poland)
Tsinghua University (Beijing, China)
St. Petersburg University of Information Technology, Mechanics & Optics (Russia)
Massachusetts Institute of Technology (U. S. A.)
- 2006 Gold: Saratov State University (Saratov, Russia)
Jagiellonian University (Krakow, Poland)
Altai State Technical University (Barnaul, Russia)
University of Twente (Enschede, The Netherlands)

- 2005 Gold: Shanghai Jiao Tong University (Shanghai, China)
Moscow State University (Moscow, Russia.)
St. Petersburg Institute for Fine Mechanics & Optics (St. Petersburg, Russia)
University of Waterloo (Waterloo, Ontario, Canada)
- 2004 Gold: St. Petersburg Institute for Fine Mechanics & Optics (St. Petersburg, Russia)
KTH – Royal Institute of Technology (Stockholm, Sweden)
Belarusian State University (Minsk, Belarus)
Perm State University (Perm, Russia)
- 2003 Gold: Warsaw University (Warsaw, Poland)
Moscow State University (Moscow, Russia)
St. Petersburg Institute of Fine Mechanics and Optics (St. Petersburg, Russia)
Comenius University (Bratislava, Slovak Republic)
- 2002 Gold: Shanghai Jiao Tong University (Shanghai, China)
Massachusetts Institute of Technology (Cambridge, MA, U.S.A.)
University of Waterloo (Waterloo, Ontario, Canada)
- 2001 Gold: St. Petersburg State University (St. Petersburg, Russia)
Virginia Tech (Blacksburg, VA, U.S.A.)
St. Petersburg Institute of Fine Mechanics & Optics (St. Petersburg, Russia)
University of Waterloo (Waterloo, Canada)

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>.

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 computer scientists. For more information about other IBM college initiatives, please visit the IBM/ACM contest Web site and click on the Student Portal button - <http://www.software.ibm.com/acm>.

About IBM

IBM is the world's largest information technology company, with 80 years of leadership in helping businesses innovate. IBM software offers the widest range of e-business infrastructure software for all types of computing platforms, allowing customers to take full advantage of the new era of e-business. The fastest way to get more information about IBM software is through the IBM home page at <http://www.software.ibm.com>.

The University of Alberta's Commitment

In conjunction with celebrating 100th anniversary, the University of Alberta is pleased to host the 2008 World Finals at the Fairmont Banff Springs Hotel in the rugged splendor of the Canadian Rockies. Located in Edmonton, the thriving capital of Alberta, and chartered shortly after Alberta's formation, the University of Alberta is one of Canada's finest universities, offering undergraduate and Ph.D. studies in Computer Science. You may find more about the University of Alberta at <http://www.ualberta.ca>.

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/>.

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/>.

2008 World Finals Teams – One hundred teams selected from 6,700 teams of 1,821 universities in 83 countries

AGH University of Science and Technology	Oxford University
Altai State Technical University	Peking University
Amirkabir University of Technology	Petrozavodsk State University
Bangladesh University of Engineering & Technology	Princeton University
Beijing Jiaotong University	Seoul National University
Beijing University of Posts and Telecommunications	Shandong University
Belarusian State University	Shanghai Jiao Tong University
Binus University	Sharif University of Technology
Brown University	Simon Fraser University
Cairo University - Faculty of Computers & Information	St. Petersburg State University
California Institute of Technology	St. Petersburg University of IT, Mechanics and Optics
Carnegie Mellon University	Stanford University
Chennai Mathematical Institute	Stavropol State University
College of Technology, Vietnam National U., Hanoi	The American University in Cairo
Cornell University	The Chinese University of Hong Kong
Duke University	The University of Tokyo
East China Normal University	Tianjin University
East West University	Tsinghua University
FaMAF - Universidad Nacional de Córdoba	Universidad Centroccidental Lisandro Alvarado
Fudan University	Universidad Complutense de Madrid
Georgia Institute of Technology	Universidad de Buenos Aires
Griffith University	Universidad de Guadalajara - CUCEI
Helsinki University of Technology	Universidad de Guanajuato
Hong Kong University of Science and Technology	Universidad de los Andes
Illinois State University	Universidade de São Paulo
Indian Institute Of Technology, Madras	Universität Karlsruhe (TH)
Information and Communications University	University of Alberta
Institute of Computing - University of Campinas	University of Auckland
Instituto Militar de Engenharia	University of British Columbia
Instituto Tecnológico de Aeronautica	University of Calgary
Instituto Tecnológico de Culiacán	University of Cape Town
Iowa State University	University of Central Florida
Izhevsk State Technical University	University of Delaware
Jagiellonian University	University of Electronic Science and Technology of China
Kim Chaek University of Technology	University of Florida
Kyoto University	University of Illinois at Urbana-Champaign
Lviv National University named after Ivan Franko	University of Natural Sciences - VNUHCM
Massachusetts Institute of Technology	University of North Texas
Michigan Technological University	University of Saskatchewan
Moscow Institute of Physics & Technology	University of Tehran, CS Dept
Moscow State University	University of Texas at Austin
Nanjing University of Aeronautics and Astronautics	University of Waterloo
Nanyang Technological University	University of Wisconsin - Madison
National Institute of Technology, Trichy, India	University of Zagreb
National Taiwan University	Ural State University
National University of Defense Technology	Vinnytsia National Technical University
Northwestern University	Warsaw University
Norwegian University of Science and Technology	Wuhan University
Novosibirsk State University	Zhejiang University
Orel State Technical University	Zhongshan (Sun Yat-sen) University