The ACM INTERNATIONAL COLLEGIATE PROGRAMMING CONTEST sponsored by IBM

FACT SHEET – 22 DEC 2006 – Third Edition – World Finals on Tokyo Bay

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 7.5. Participation has grown to involve several tens of thousands of the finest students and faculty in computing disciplines at 1,756 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 December 2006) – Last year, participation increased by 10% from 5,606 to 6,099 teams representing 1,756 universities from 82 countries on six continents, not counting 725 teams competing in preliminaries.

- *World Finals* (March 12-16, 2007, Hilton Tokyo Bay, Maihama, Japan) – Eighty-eight (88) 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. The World Finals is hosted by IBM Tokyo Research Lab and the ACM Japan Chapter.

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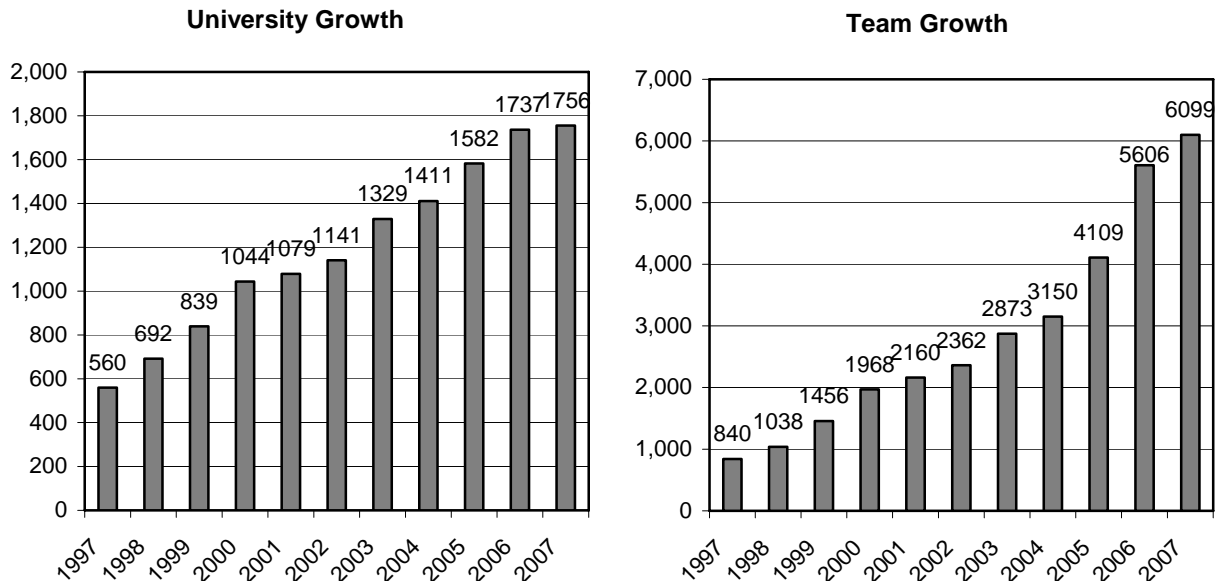
Judging is relentlessly strict. The students are given a problem statement – not a requirements document. They are given an example of test data, but they do not have access to the judges' test data

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 over 6,099 teams representing over 1,700 universities in 82 countries. Since the beginning of IBM's sponsorship in 1997, participation has increased by a factor of seven and a half. 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.

University Growth

Year	Value
1997	560
1998	692
1999	839
2000	1044
2001	1079
2002	1141
2003	1329
2004	1411
2005	1582
2006	1737
2007	1756

Team Growth

Year	Value
1997	840
1998	1038
1999	1456
2000	1968
2001	2160
2002	2362
2003	2873
2004	3150
2005	4109
2006	5606
2007	6099

World Finals 2007 – the final round for the 2006 Regionals

Eighty-eight teams from regional contests servicing universities world-wide will qualify to advance to the World Finals to be held at the Hilton Tokyo Bay in the Tokyo Disney Resort, March 12-16, 2007. The World Finals is hosted by ACM Japan Chapter and the IBM Tokyo Research Lab. Recent medal winners in order of finish are:

- 2006 Gold: Saratov State University (Saratov, Russia)
                Jagiellonian University (Krakow, Poland)
                Altai State Technical University (Barnaul, Russia)
                University of Twente (Enschede, The Netherlands)
- 2006 Silver: Shanghai Jiao Tong University (Shanghai, China)
                St. Petersburg State University (St. Petersburg, Russia)
                Warsaw University (Warsaw, Poland)
                Massachusetts Institute of Technology (Cambridge, MA, U.S.A.)

- 2006 Bronze: Moscow State University (Moscow, Russia.)
  Ufa State Technical University of Aviation (Bashkortostan, Russia)
  University of Alberta (Edmondton, Canada)
  University of Waterloo (Waterloo, Canada)

- 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.

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/.

2007 World Finals Teams - Top 88 of 6,099 teams from over 1,700 universities in 82 countries

Amirkabir University of Technology	Stanford University
Arab Academy for Science and Technology	Stavropol State University
Bangladesh University of Engineering and Technology	Tsinghua University
Belarusian State University	Twente University
Benemérita Universidad Autónoma de Puebla	Universidad Central de Venezuela
Bina Nusantara University	Universidad Centro Occidental Lisandro Alvarado
California Institute of Technology	Universidad de Buenos Aires
Carnegie Mellon University	Universidad de Chile
Cornell University	Universidad Tecnologica de la Mixteca
Duke University	Universidade de São Paulo
East China University of Science and Technology	Universidade Federal do Rio de Janeiro
Fudan University	Universitat Politècnica de Catalunya
Harvard University	University of Adelaide
Hefei University of Technology	University of Alberta
Indian Institute of Technology Bombay	University of Auckland
Indian Institute of Technology Madras	University of British Columbia
Instituto Tecnologico de Aeronautica	University of Bucharest
Johannes Kepler Universität Linz	University of Calgary
Kazakh National University	University of Cape Town
Korea Advanced Institute of Science and Technology	University of Central Florida
KTH - Royal Institute of Technology	University of Hong Kong
Kyoto University	University of Illinois at Urbana-Champaign
Massachusetts Institute of Technology	University of Minnesota
Mercer University	University of Nebraska - Lincoln
Moscow State University	University of New South Wales
Nanyang Technological University	University of North Carolina at Chapel Hill
National Institute of Technology - Trichy	University of Science and Technology of China
National Taiwan University	University of Texas at Austin
National Technical University of Ukraine	University of Texas at Dallas
National University of Defense Technology	University of Tokyo
Northwestern University	University of Toronto
Novosibirsk State University	University of Waterloo
Orel State Technical University	University of Wisconsin - Madison
Peking University	University of Wroclaw
Petrozavodsk State University	Ural State University
Pontifícia Universidade Católica do Rio de Janeiro	Vanderbilt University
Rutgers, The State University of New Jersey	Vietnam National University - Hanoi
Saitama University	Virginia Tech
Saratov State University	Vologda State Pedagogical University
Seoul National University	Warsaw University
Shanghai Jiao Tong University	Xiamenen University
Sharif University	Xidian University
St. Petersburg State University	Zhejiang University
St. Petersburg University of IT, Mechanics and Optics	Zhongshan University