The 35th Annual World Finals of the ACM International Collegiate Programming Contest (ICPC) sponsored by IBM

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 ICPC has increased by 1000%. Participation in the ICPC and ICPC supported contests has grown even faster involving over thirty thousand of the finest students and faculty in computing disciplines from over two thousand universities from 88 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 2010) – This year 24,915 contestants competed on 8,305 teams from 2,070 universities from 88 countries on six continents at over 250 sites.

- **World Finals** (May 27-31, 2011, Orlando, Florida) – One hundred and five (105) world finalist teams will compete for awards, prizes and bragging rights at The Peabody Orlando Hotel. 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 24,915 contestants from 2,070 universities in 88 countries competing this year. Since the beginning of IBM’s sponsorship in 1997, participation has increased 1000%. 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/. Growth continues.

![ACM-ICPC Student Participation](image)

**World Finals 2011 – the final round for the 2010 Regionals**

One hundred and five teams from regional contests servicing universities worldwide qualified to advance to the World Finals to be held in Orlando, Florida, May 27 – 31, 2011. The World Finals is hosted at the Peabody Orlando. Recent medal winners in order of finish are:

- **2010 Gold:** Shanghai Jiaotong University
  Moscow State University
  National Taiwan University
  Taras Shevchenko Kiev National University

- **2009 Gold:** St. Petersburg State University of Information Technology, Mechanics & Optics (Russia)
  Tsinghua University (China)
  St. Petersburg State University (Russia)
  Saratov State University (Russia)
• 2008 Gold:  St. Petersburg State 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 State 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 allows for the growth and innovation of human life, including the way people live, work, and govern themselves; the way services are ordered and delivered; and the way the environment is protected.

The world is already connected economically, technically and socially. However, being connected alone is not sufficient. The world needs new generations of talent, leaders and problem solvers to infuse the intelligence into our daily lives.

IBM is the world’s largest information technology and service provider. IBM has 35,000 software engineers in more than 90 research and development laboratories around the globe, who focus on solving real-world business issues for clients in more than 170 countries. IBM offers new services to transform businesses using the latest technologies, including but not limited to: business analytics which turn information into insights, as well as systems optimization, risk and security management, business process management, collaboration and cloud computing. IBM helps clients in various industries, including but not limited to: smarter cities, energy, utility, banking, financial markets, chemicals, petroleum, electronics, public service, health care, retail, telecommunications, transportation, manufacturing, media and entertainment. 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/

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 with global enterprise technology development headed by Dr. Jeff Donahoo, Deputy Executive Director. 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 2011 ACM-ICPC World Finals List by Regions (In alphabetical order by region)

**Africa and the Middle East**
- Ain Shams University, Egypt
- Alexandria University - Faculty of Engineering, Egypt
- Cairo University - Faculty of Computers and Information, Egypt
- German University in Cairo, Egypt
- King Abdullah University of Science and Technology, Saudi Arabia
- University of Stellenbosch, South Africa
- American University of Sharjah, United Arab Emirates

**Asia**
- Bangladesh University of Engineering and Technology, Bangladesh
- Beijing Jiaotong University, China
- East China Normal University, China
- Fudan University, China
- Fuzhou University, China
- Hangzhou Dianzi University, China
- Harbin Engineering University, China
- Harbin Institute of Technology, China
- Huazhong University of Science & Technology, China
- Peking University, China
- Shandong University, China
- Shanghai Jiaotong University, China
- Sichuan University, China
- Tianjin University, China
- Tsinghua University, China
- University of Electronic Science and Technology of China, China
- Wuhan University, China
- Zhejiang Normal University, China
- Zhejiang University, China
- Zhongshan (Sun Yat-sen) University, China
- Hong Kong University of Science and Technology, Hong Kong
- The Chinese University of Hong Kong, Hong Kong
- DJ Sanghvi College of Engineering, India
- Indian Institute of Technology - Delhi, India
- Indian Institute of Technology - Kanpur, India
- International Institute of Information Technology - Hyderabad, India
- Amirkabir University of Technology, Iran
- Sharif University of Technology, Iran
- Kyoto University, Japan
- University of Tokyo, Japan
- Korea Advanced Institute of Science and Technology, Korea, Republic of
- Seoul National University, Korea, Republic of
- Nanyang Technological University, Singapore
- National Taiwan University, Taiwan
- Ho Chi Minh City University of Science, Vietnam
Europe & the Russian Federation

Belarussian State University  Belarus
University of Helsinki  Finland
Friedrich-Alexander-University Erlangen-Nuremberg  Germany
Kazakh-British Technical University  Kazakhstan
Leiden University  Netherlands
Jagiellonian University in Krakow  Poland
University of Warsaw  Poland
University of Wroclaw  Poland
Moscow Institute of Physics & Technology  Russian Federation
Moscow State University  Russian Federation
Nizhny Novgorod State University  Russian Federation
Novosibirsk State University  Russian Federation
Orel State Technical University  Russian Federation
Perm State University  Russian Federation
Saratov State University  Russian Federation
South Ural State University  Russian Federation
St. Petersburg State University of IT, Mechanics and Optics  Russian Federation
St. Petersburg State University  Russian Federation
Ural State University  Russian Federation
Swiss Federal Institute of Technology Zurich - VIS  Switzerland
Donetsk National University  Ukraine
Lviv National University  Ukraine
Taras Shevchenko Kiev National University  Ukraine
Taurida V.I. Vernadsky National University  Ukraine

Latin America

Universidad de Buenos Aires - FCEN  Argentina
Universidad Nacional de Córdoba - FaMAF  Argentina
Universidad Católica Boliviana - La Paz  Bolivia
Instituto Tecnológico de Aeronáutica  Brazil
Universidade de São Paulo - Escola Politécnica  Brazil
Universidade de São Paulo - IME  Brazil
Universidade Federal de Minas Gerais  Brazil
Universidade Federal de Pernambuco  Brazil
Universidade Federal do Paraná  Brazil
EAFIT University  Columbia
Universidad del Valle  Columbia
Universidad Nacional de Colombia - Bogotá  Colombia
Universidad de La Habana  Cuba
Universidad de las Ciencias Informáticas  Cuba
Universidad de Guanajuato - CIMAT  Mexico
Pontificia Universidad Católica del Perú  Peru
### North America

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