St. Petersburg National Research University of IT, Mechanics & Optics and ACM International Collegiate Programming Contest

Fedor Tsarev
tsarev@rain.ifmo.ru
St. Petersburg National Research University of IT, Mechanics & Optics
Association for Computing Machinery
International Collegiate Programming Contest (ACM ICPC)

- Since 1979, sponsored by IBM – 36 championships
- Became world championship in early 90-s
- Team = 3 students + 1 computer
- **Over 10000 teams** – **2200 universities** – **85 countries**
- Multi-tiered competition:
  - 260 Quarterfinals
  - 30 Semifinals
  - World Finals (112 teams)
- Medals are given to top 12 teams – 4 gold medals, 4 silver medals and 4 bronze medals
- 5 semifinals and 2 finals per student at most
- World Finals 2013 will be hosted by St. Petersburg University ITMO
Russian teams on World Finals

- World champions:
  - 2000 – St Petersburg SU
  - 2001 – St Petersburg SU
  - 2004 – University ITMO
  - 2006 – Saratov SU
  - 2008 – University ITMO
  - 2009 – University ITMO
  - 2012 – University ITMO

Training for ACM ICPC in University ITMO

- [http://neerc.ifmo.ru/trains](http://neerc.ifmo.ru/trains)
- Coach – Andrew Stankevich, Ph.D.
  - Gold and silver medal in ACM ICPC World Finals (2000, 2001)
  - President of Russia Award in the area of education (2003)
  - Award for Great Contribution to Spreading ACM ICPC in Europe (2004)
  - Best Coach Award (2009)
- Five hour trainings two times a week
- About 70% of first and second year students of Computer Technologies Department take part in trainings
- Special training camps in winter and summer in Petrozavodsk
2004, Prague, Czech Republic

- University ITMO – 1-st place
- MIT – 5-th place
- Caltech – 7-th place
- Harvard – 9-th place
2004 World Champions
World champions 2004 and President of Russia Vladimir Putin
2008, Banff, Canada

- University ITMO – 1-st place
- MIT – 2-nd place
- Tsinghua (China) – 6-th place
- Stanford – 7-th place
- All 11 Russian teams are among top 30 teams of the world
World champions 2008 and St. Petersburg governor Valentina Matvienko
ACM Awards 2008
ACM Awards 2008
University ITMO – 1-st place
Tsinghua – 2-nd place
Oxford – 5-th place
MIT – 7-th place
Carnegie Mellon – 8-th place
World Champions 2009
World Champions 2009 with President of Russia Dmitry Medvedev
ACM Awards 2009

ACM International Collegiate Programming Contest
2012, Warsaw, Poland

- University ITMO – 1-st place
- Harvard – 7-th place
- University of Tokyo – 11-th place
World Champions 2012 and President of Russia Vladimir Putin
World Champions 2012 and Vladimir Lenin
Cooperation with ETH Zurich

- ETH Zurich:
  - 21 Nobel Prizes
  - Never advanced to ACM ICPC World Finals before 2011

- University ITMO:
  - Participates in ACM ICPC World Finals since 1995
  - Four times ACM ICPC World Champions

- World Champions from University ITMO regularly come to ETH Zurich for trainings

- Result – ETH Zurich team advanced to World Finals for the first time in the history

- Establishment of Software Engineering and Verification Chair in University ITMO (head – Prof. Bertrand Meyer)

- Davos Informatics camps for high-school students
Thank you!