



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

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# 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
- Five third places (1999, 2001, 2003, 2005, 2007) – University ITMO (gold medals)





# Training for ACM ICPC in University ITMO

- 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









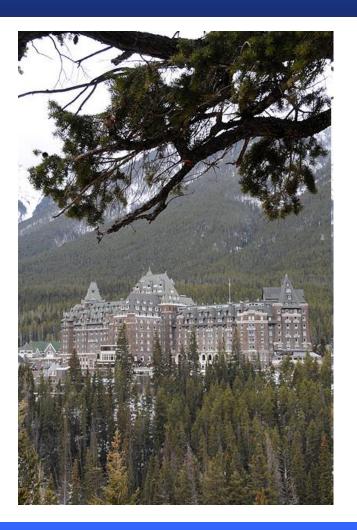
## World champions 2004 and President of Russia Vladimir Putin





### 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**













### 2009, Stockholm, Sweden

- 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 with President of Russia Dmitry Medvedev













- University ITMO 1st place
- Harvard 7-th place
- University of Tokyo –
   11-th place







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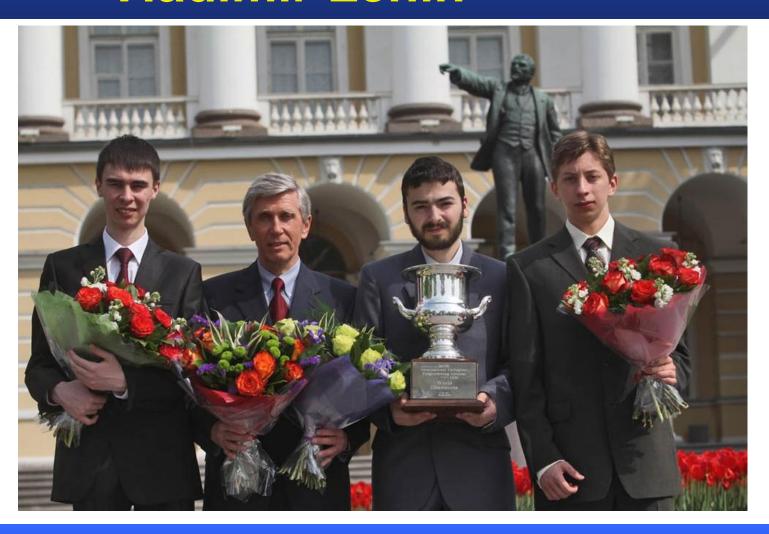


### World Champions 2012 and President of Russia Vladimir Putin





## 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!