Women in IT and Computer Science

Russian view

IT and Computer Science in Russia Review

Moscow State University
The Department of Computational Mathematics and Cybernetics

Associate professor,
Head of the Intel-MSU students Lab

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Overview

1. Introduction
   Ladies of science in Russian history.

2. Current status
   Some statistic information.

3. Case study
   Students and PhD students at MSU –Intel Lab.

4. What should we do for diversity?
   Now it is time to change current status.
## Introduction

M.V. Lomonosov Moscow State University is the largest university in Russia. Founded in 1755, it is also the oldest. As of 2004, the university has some 4,000 staff teaching 31,000 students and 7,000 postgraduates. MSU Faculty of Computational Mathematics and Cybernetics is a part of Moscow State University, founded in 1970 by Andrey N. Tikhonov. CMC is the leading Russian research and training center in the fields of applied mathematics, computing and software development. Education at CMC combines in-depth theoretical studies, extensive practical exercises, and research.

## History

<table>
<thead>
<tr>
<th>Name</th>
<th>Years</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sofia Vasilevna Kovalevskaya</td>
<td>1850 - 1891</td>
<td>“Russian mathematician, women's rights activist, and playwright.”</td>
</tr>
<tr>
<td>Nina Karlovna Bari</td>
<td>1901 - 1961</td>
<td>“Nina Karlovna Bari was a woman whose contribution to mathematics was great.”</td>
</tr>
<tr>
<td>Sofia Aleksandrovna Yanovskaya</td>
<td>1896 - 1966</td>
<td>“Soviet philosopher, logician, and organizer of science.”</td>
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## Today

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Olga Dergunova</td>
<td>Microsoft Russia &amp; CIS President</td>
</tr>
<tr>
<td>Natalya Kaspersky</td>
<td>The CEO of Russian Kaspersky Lab</td>
</tr>
<tr>
<td>Olga Oleynik</td>
<td>Member of the Russian Science Academy</td>
</tr>
<tr>
<td>Olga Laduzhenskaya</td>
<td>Member of the Russian Science Academy</td>
</tr>
<tr>
<td>Galina Raznichenko</td>
<td>Chairman of Russian association &quot;Women in science and education&quot;</td>
</tr>
</tbody>
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Women in IT and Computer Science. Russian view

Current situation

Students

- Women
- Men

<table>
<thead>
<tr>
<th>Category</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PhD in CS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Sc. in CS</td>
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</tbody>
</table>

Tutors

- Women
- Men

<table>
<thead>
<tr>
<th>Category</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>deans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rectors</td>
<td></td>
<td></td>
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</tbody>
</table>

Gender Statistics

<table>
<thead>
<tr>
<th>Category</th>
<th>M</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>population (millions)</td>
<td>66.8</td>
<td>76.3</td>
</tr>
<tr>
<td>life interval (years)</td>
<td>58.47</td>
<td>72.04</td>
</tr>
<tr>
<td>higher education(%)</td>
<td>20</td>
<td>25</td>
</tr>
</tbody>
</table>

Salary

- 2005
- 2006

Men’s salary in science is 30% higher than women’s one

Number of female students in Russia

- 1993
- 1995
- 1997
- 1999
- 2001
- 2002
- 2005

- 52
- 54
- 56
- 58
- 60
- 62
- 64
- 66
- 68
- 70
- 72
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**Case study**

**PhD Irina Fedulova**
Best student, PhD student, Doctor degree, participation in Intel scholarship program, now she is assistant professor of MSU
Degree work: "Development of mathematical models for biomedicine problems"

“I’m very satisfied with my study in MSU. During my study I didn’t mentioned any kind of gender problems. Also there are no problems if you are working as a programmer. But I think that it is a real problem for woman in Russia to reach manager position in IT and CS. So the most women after graduation from our department select another professional area, for example, business analysis.”

**PhD Irina Shevtsova**
Best student, PhD student, Doctor degree April 2007, student of Intel-MSU Students Research Lab since 2003
Degree work: “Estimation of the rate of convergence in central limit theorem for independent random quantity”

“I don’t think that gender problems are very visible. Some times you can see vacations where it is pointed that this vacation is only for men. But the most of my female fellow-students work on programmer, researcher or analytic positions.”

**PhD Vera Goritskaya**
PhD student, Doctor degree, participation in Intel scholarship program
Degree work: "Neural network approach to task scheduling in multiprocessors"

“I am greatly satisfied with my profession and happy to be studying at the best university of Russia. Sometimes it is really hard work, yet I enjoy it. I don’t think that we are facing really serious problems with women rights within our department or IT industry. Usually it does not go beyond some common stereotypes: sometimes there is a kind of irony regarding women of our profession and their professional skills. But all these stereotypes are wiped out when it comes to real problems needed to be solved.”

**PhD student Oxana Djossan**
PhD student, participation in Intel scholarship program
Degree work: “Parallel video signal processing”

“All doors are opened. Sometimes it is hard because of high standards and requirements. But at the same time the world of science is very interesting and exciting.”

**PhD student Elena Popova**
PhD student, participation in Intel scholarship program
Degree work: “Ensemble of decision trees for solving source localization problem in the brain”

“I think we don’t have gender problems at all. Quite the contrary professors and teachers always try to help and support our female students during studying and at examinations. They are supposed to obtain knowledges in computer science harder then male students.”
**Women in IT and Computer Science. Russian view**

**What could we do?**

**MSU based Intel Center of Female Competence in CS and IT**

The idea is to create on the base of our Intel-MSU students Lab a centre of growth of young women competitive abilities.

**The main targets:**

1. **To help female students to build their career**
   
   It will be a good possibility for young women to try themselves in profession and to work as scientific researcher.

2. **To expand our positive experience on the other Russian universities**

   Intel-MSU students Lab already has a good positive experience in this area. Women are successfully working in different directions of CS.

3. **To study more deeply current situation in young women life after graduating of universities**

4. **Not to fight for gender equality but to use women advantages**

   Such center will allow women to use their advantages in different directions of scientific research. Only women can combine creative work with exactness.