Day with industrial partners
About me

• Doctorate at Faculty of Informatics, MU

• Research Coordinator at Y Soft

• linkedin.com/in/AndriyStetsko
About Y Soft

- We build a **distributed system** that is applied in domain of printing scanning and copying

- We deal with **security**, **availability**, **scalability**, and **efficiency** issues

- We have what to learn and we have what to share with others
Innovate
Innovate methodology
Find employees

Y Soft

Teach
Research
Find employees

FI

Student
Get knowledge
Get experience
Get job

Cooperation = working together for mutual benefit
We are trying to maximize this intersection
What do we do to achieve that?

- We are doing our best to identify topics that are interesting for all involved
- We dedicate our time and money to provide technical and financial support
- We are doing our best to find supervisors that work in field of topic
Security

• 9 students
  – Microsoft SDL
  – PDF security
  – Metaexploit
  – Xamarin/Android security
  – Coverity
  – Sqlmap, W3AF
  – FindBugs, FxCop
  – Protocol verification
  – Fuzzers

• Regular group meeting (every two weeks)
• Open part-time position [vulnerability researcher]
• Contact me if you have any interesting topic in mind
Distributed systems

• Datastore Riak
• Distributed locks
Mobile platforms

• Testing Techniques for Mobile Device Applications

• Cross-platform development of smartphone application with:
  – RhoMobile
  – Telerik
  – PhoneGap (Apache Cordova)
  – Kivy
Other available topics

• Bachelor thesis:
  – Load balancing using HAProxy

• Master thesis:
  – Booking system for multifunctional devices
  – Deployment of large scale enterprise applications
  – Code Mutation Analysis
  – Optimization of JVM settings for application performance
  – Online analytical processing for open source relational and NoSQL databases
Statistics – theses

<table>
<thead>
<tr>
<th>Type</th>
<th># of defended</th>
<th># of running</th>
<th># of open</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor</td>
<td>17</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Master</td>
<td>15</td>
<td>9</td>
<td>11</td>
</tr>
</tbody>
</table>

In 2013-2014, there were defended:

- 9 bachelor theses (4 A + 2 B = 66%)
- 8 master theses (4 A + 3 B = 87%)
- 3 FI MU Dean’s Awards (18% of theses)

How can you get involved?

Find topic in IS or contact me
Statistics – student projects

<table>
<thead>
<tr>
<th>Finished</th>
<th>Running</th>
<th>Open</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Positions that will be open this spring
- 1 position in field of distributed systems
- 1 position in field of security
- Regular financial reward

How can you get involved?

Take part in Competition for talented students

Win the competition

Get paid position in FI laboratory
Statistics – part-timers

<table>
<thead>
<tr>
<th>Finished</th>
<th>Running</th>
<th>Open</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

How can you get involved?

Select thesis topic
   Show promising results
   Get part-time job
Statistics – supervisors and consultants

• Supervisors
  – 14 in total since 2008 (3 our employees)
  – Currently 9 (3 our employees)

• Consultants (all our employees)
  – 14 in total since 2008
  – Currently 13

• In some cases, supervisor = consultant
• Level of involvement is different
Success stories

• Petr Bartoň
  – Created a prototype of SafeQ demo during his bachelor thesis
  – Got part-time job
  – Currently, he works on production version
  – 1\textsuperscript{st} version was recently released

• Michal Rajčan
  – Extended a tool that is internally used by our QA
  – Got part-time job
  – Currently, he is adding additional features
Thank you for your attention
Visit us at our stall

Contact:
Andriy.Stetsko@ysoft.com
xstetsko@fi.muni.cz