

Pavel Shved

phone: +7 9154370591

e-mail: pavel.shved@gmail.com

web: <http://coldattic.info/>

EXPERIENCE

Senior Software Engineer

Oct 2011 – Current

ROSA

- ◆ Supervised and participated in a study of development processes in major Linux distributions.
- ◆ Fixed a dozen of bugs in core components of Mandriva Linux distribution;
- ◆ Helped to develop and deploy two Ruby on Rails website projects that had manpower problems, taught one of my peers how to program with Rails.

Research Intern/Developer

Sep 2007 – Oct 2011

Institute for System Programming of the Russian Academy of Sciences

Linux Driver Verification program

Apr 2009 – Oct 2011

- ◆ Improved BLAST, an orphaned open-source tool for static analysis of C programs, the tool itself written in OCaml. Increased its speed by a factor of 30, designed and implemented many extensions to the static verification algorithms used in BLAST; maintain [the tool](#) as of now;
- ◆ Set up a custom continuous build server that runs tests before commits and e-mails on failures;
- ◆ Designed how to run our application in a cloud; implemented the task scheduler and the task exchange infrastructure in Ruby over the AMQP protocol;

Linux Standard Base infrastructure project

Sep 2007 – Mar 2009

- ◆ Designed and implemented a tool to automatically harvest Linux C++ headers, analyze them, and generate their HTML layout ([sample](#)); used a MySQL database with millions of rows;
- ◆ Researched C++ binary compatibility, published [a paper](#) about it; it's linked from GCC manual.

Google

Summer of Code 2009 Student

May 2009 – Aug 2009

- ◆ Prepared more than 50 patches to the source code of OpenJDK7, which was written in C++ and Java, to make it compliant with Linux Standard Base rules;
- ◆ Collaborated with the Linux Standard Base team in the US remotely.

EDUCATION

Moscow Institute of Physics and Technology

M.S. Applied Mathematics and Physics

2008 – 2010

Specialization: System programming; GPA: 3.5/4.0

B.S. Applied Mathematics and Physics

2004 – 2008

Specialization: Applied mathematics; GPA: 3.5/4.0

SKILLS AND QUALITIES

- ◆ Programming languages: C++, Ruby, Perl, C, Bash; familiar with OCaml, SQL, Python, Pascal;
- ◆ Proven ability to learn new programming languages for a project;
- ◆ Adept of best engineering practices: deployed and maintained Git repository and bug tracker, set up nightly builds, volunteered as a ScrumMaster;

PERSONAL ACCOMPLISHMENTS

- ◆ Run a programming blog at <http://coldattic.info/> with 2300+ visits a month. Developed its backend in Ruby on Rails on my own, along with personal image gallery and video storage;
- ◆ Authored and co-authored 1 journal paper and 5 conference publications;
- ◆ Was ranked #513 out of 500,000+ users on StackOverflow.com, a programmers' experience sharing site (as of January 2011);
- ◆ Designed a piece of C++ code that revealed a bug in G++ compiler ([#41703](#)).
- ◆ Participated in Competition on Software Verification'12 with BLAST, achieving the 5th place.