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Date of birth: 13 July 1976
Place of birth: Kaliningrad, Soviet Union
Marital status: married, two children
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**** SUMMARY ****

- More then 10 years of experience in UNIX programming.
- Experience in Nokia MAEMO platform and OpenEmbedded for ARM.
- Experience in low-level programming (x86, arm, U-Boot, MS-DOS)
- Experience in C programming in UNIX (Linux/FreeBSD).
- Linux kernel development.
- Unix shell scripting, Tcl/Tk, python, Perl.
- Digital signal processing (amateur radio)
- Experience in project management.
- PhD degree in mathematical and theoretical physics (2004).
- Discrete math and algorithm designs
- Some UNIX/Windows system administration experience.

**** TECHNICAL SKILLS ****

Operating systems: Linux 2.2/2.4/2.6/3.0, FreeBSD 6.x/7.x/8.0, MacOS X, MS-DOS, FreeDOS, Novel NetWare 3.x, Windows 3.1/95/98/NT4/2000/XP

Packages: gcc/g++, autotools, CVS, subversion, git, Clearcase, qemu/kvm, scratchbox, MySQL, GTK-2, QT3, Bugzilla, glibc/uclibc, ncurses, libx11, libfuse, libpthread, libsmbclient, hamlib, ALSA, dbus, NET SNMP, LDAP (openldap), iptables, Borland Pascal, Turbo C, Visual Studio, MS Word, LaTeX.

Packaging: slackware/debian/redhat.

Digital signal processing: FSK, discrete FFT/IFFT, sound filtering, AMTOR/SITOR/RTTY, amateur radio.

Protocols and standards: TCP/IP, IPX/SPX, SNMP v2, SIP, NAT, NetFlow, Cisco IP Accounting, NMEA.

Processors: TI OMAP 1710, TI Omap L138, Atmel AT91SAM9G20/G45, Intel PXA270 (a little), FreeScale P4080 DS (a little), IBM Cell (a little), x86.

Programming Languages: C/C++, x86/arm assembly, Shell programming, Tcl/Tk, Perl (a little), Python (a little), Pascal, Waterloo Maple, MatLab (a little).

Linux kernel/u-boot: customer board support, tty/n_gsm.

Administration: Linux, Windows NT 4.0.

**** NUMERICAL CALCULATION SKILLS ****

Numerical methods: unconstrained optimization and solution of nonlinear equations, molecular dynamics, monte-carlo, least squares (a little), finite element method (a little).

Packages: libpthread, Kiss FFT, Waterloo Maple, MathLab (a little), MPI (a little), OpenMP (a little), NVIDIA CUDA (a little) , AMD FireStream (a little), IBM Cell SDK (a little), BLAS, GROMACS (a little), LaTeX.

Certificates
Master in Linux Administration (General), BrainBench, September 23, 2004.
Master C Programmer, TekMetrics (BrainBench), May 17, 1999.
C++ Programmer, TekMetrics (BrainBench), May 17, 1999.

**** EMPLOYMENT ****

2010 – present: Lanit-Tercom, Senior Engineer.
2007 – 2010: Siemens, Senior Engineer.
2004 – 2007: DataArt, Senior Developer.
2004 – 2004: SoftJoys, Developer.
2003 – 2003: Viking Bank, Network administrator, IT specialist.
1998 – 2010: Saint-Petersburg State University, Statistical Physics departments, Researcher, system administrator.

**** EDUCATION ****

2004 – PhD in theoretical and mathematical physics, Saint-Petersburg State University, Statistical Physics department.
2000 – MS in physics (graduated with honors), Saint-Petersburg State University.
1998 – BS in physics (graduated with honors), Saint-Petersburg State University.

**** PARTICIPATION IN OPEN SOURCE PROJECTS ****

SMBNetFS: http://sourceforge.net/projects/smbnetfs

Description: SMBNetFS is a user-space filesystem for Linux/FreeBSD that allows you browse a Samba/Microsoft network much like the network neighborhood in Microsoft Windows.

Role: author

License: GNU GPL.

hamlib: http://hamlib.sourceforge.net/

Description: Ham Radio Control Libraries

Role: add support of Vertex Standart VX-1700 transceiver.

License: GNU LGPL.

Linux kernel: http://kernel.org/

Role: tty/n_gsm serial line discipline fixes.

HAL: http://freedesktop.org/wiki/Software/hal

Description: HAL is a specification and an implementation of a hardware abstraction layer.

Role: Reduced memory consumption by hald daemon to make it suitable for embedded devices.

**** PROFESSIONAL EXPERIENCE ****

Lanit-Tercom, St.-Petersburg, Russia. Senior software engineer. Part-time position.

November 2010 – present

Development of river vessel equipment with monitoring capabilities.

- Radio: supports of Vertex Standart VX-1700 and GRANIT transceivers (hamlib)
- Radio: AMTOR/SITOR modulation/demodulation. (FSK, FFT/IFFT, sound filtering, AMTOR/SITOR/RTTY, amateur radio, ALSA)
- 3G modem initialization and support (Linux kernel, several tty/n_gsm fixes)
- Hardware support (u-boot, Linux kernel)
- Core (Tcl/Tk, dbus, AIS/NMEA message processing, sensors, navigation equipment integration, radio schedule, gsm/radio call, navigation routes)
- Software integration (OpenEmbedded, C, Tcl/Tk, shell)
- Lead engineer role.

Siemens Corporate Technologies SE2, St.-Petersburg, Russia. Senior software engineer. Part-time position.

February 2007 – November 2010

Member of the Corporate Competence center Embedded Linux. Support of Siemens Business Units in Embedded Linux Projects

- Project with Russian COM: parsing of protocol messages of translator from European LI (Lawful Interception) to Russian SORM (Russian: COPM).
- Project with PG: Writing NET SNMP v2 agent for redundancy monitor.
- Project with SEN. Upgrade SUSE build infrastructure in ClearCase Environment and make it suitable for usage with multiple SEN projects. SUSE/OpenSUSE RPM packaging.
- Project with MAPC. Implement IIR LP/HP/BP/BS and some other radio filters algorithm in C++ for electronic oscilloscope.
- Project with Swiss SBT. Create build environment based on OpenEmbedded for ARM926EJ-S based board.
- Project with SBT. Migration from Intel PXA255 to Intel PXA270 based board.
- Project with PG: Patch Linux scheduler to investigate reasons of unacceptable high timeouts in select() calls.
- Project with NSN. Hardware hypervisor setup on FreeScale P4080DS board.
- Project with NSN. Software monitor application that watches the execution of several processes and restarts them if needed.
- R&D project. Development of SLIND, building cross-toolchains for SLIND.
- R&D project. Comparison of multi-core possibilities of x86, Cell and GPGPU for HPC.
- R&D project. Add support of Voipac PXA270 board to upstream U-Boot, rewrite/update PXA2xx initialization in U-Boot. (In progress)

DataArt Company, Saint-Petersburg, Russia. Senior software engineer. Part-time position.

October 2004 – February 2007

Member of Linux team.

- Project with Nokia. Build ARM semi-eabi gcc-3.4 based cross-toolchain for scratchbox.
- Project with Nokia. Participation in research of memory consumption by different X11 applications on MAEMO platform and tune kernel memory limit parameters, test killing of background process, improvements of background killing algorithms, develop semi-automatic tests.
- Project with Nokia. Participation in evaluation of different task schedulers for MAEMO platform.
- Project with Nokia. Participation in a benchmark of ext2/3, xfs, jfs, reiser3/4 filesystems on usb flash for MAEMO.
- Project with Nokia. Participation in testing of MAEMO X-server modification.
- Project with Nokia. Testing of JFFS2 filesystem (POSIX compatibility + unclean reboot test).

SoftJoys Company, Saint-Petersburg, Russia. Software engineer. Part-time position.

July 2004 – October 2004

- Participant in porting of VoIP application from Windows to Linux/MacOS X, implementation of some Windows MFC's classes using QT3 in Linux/MacOS X.

Bank "Viking", Saint-Petersburg, Russia. Network administrator, IT specialist. Part-time position.

February 2003 – August 2003

- Creation of Linux based traffic accounting system for small (about 150 computers) office network.

Saint-Petersburg State University, Saint-Petersburg, Russia. Full-time position.

September 2004 – 2010

- Scientific research in the statistical physics department of Saint-Petersburg State University.
- Laboratory for students of Statistical Physics Department about Numerical Investigation of Molecular Dynamics.
- Developing a laboratory for students of Statistical Physics Department about a parallel programming, that will give students basic knowledge about multi-thread programming, OpenMP, MPI and PBLAS. (In progress)

Saint-Petersburg State University, Saint-Petersburg, Russia. Student.

September 1997 – December 2003

- Developing Linux/Windows application for solution of a system of non-linear equation for profile of a charged dielectric droplet in the electric field.
- Developing Linux application for solution of a system of non-linear equation for equilibrium profile of the micelle in the surfactant solution.

Kaliningrad State University, Kaliningrad, Russia. Student.

September 1993 – August 1997

- Developing in assembly a memory resident program and special application for remote control of

desktops in ipx/spx based Novel network.