

RESUME

OBJECTIVE

I would like to take up a position of Senior Software Engineer. I am ready to work hard at an interesting research and engineering problems on my own or as part of a team. I prefer interdisciplinary R&D, prototyping, product design and implementation.

My hopes about the new job:

- Interdisciplinary research, design and implementation.
- Working on significant part of the project.
- Business trips (including overseas).
- Coaching and mentoring team members and sharing my experience.
- Relocations are welcome.

SUMMARY

I have 11 years of experience in software engineering as well as low- and high-level computer programming in such fields as digital signal processing, computer graphics, systems programming, computer networks, operating systems and telecommunications. My common skills are:

- Microprocessor architectures: fluent in Intel x86, working knowledge of Intel IPF, Intel 8051 and Microchip PIC.
- Programming languages: I have experience of programming many languages, but most fluent in C/C++ and Intel x86 assembler.
- Operating systems: system programming for Windows and Linux; fluent knowledge of Windows APIs and internal infrastructure; Linux: system software programming such as compilers, translators, etc.
- Excellent debugging skills in multi-threaded environment.
- Exceptional multi-threaded programming skills in complex multi-process environment.
- Ability of writing high-quality code at alarming rates.
- Design and implementation of distributed applications.
- Good knowledge of discrete mathematics, theory of algorithms, data structures, and other aspects of Computer Science applied to software engineering.
- Ability of quick studying new technologies and immediately applying them in practical tasks.
- Technologies and APIs: I have experience of using a very large set of technologies and APIs. Most notably: Win32 API, DirectX, OpenGL, IPC, Web, Network protocols, etc.
- Natural languages: fluent English at pre-advanced level (also professional-oriented, strong writing skills – emails and technical documentation, examples available upon request).
- Experience in telecommunication technologies such as ISDN, ISUP, etc.
- Desire to study new technologies, computer architectures, natural and computer languages.

PROFESSIONAL KNOWLEDGE AND SKILLS

- Technologies and APIs: IPC/ITC, RPC, COM/DCOM, Win32 API, .NET, Sockets API, HTML/DHTML/XML, ADO, ASP, ASP .NET, SSI, CGI, Internet protocols (HTTP, FTP, SMTP, POP3, SSL/TLS, DNS, etc.), OpenGL, DirectX.
- Programming languages, compilers and IDEs: Assembler Intel x86 (Intel and AT&T syntaxes, TASM, MASM, NASM translators, GCC compiler); C/C++ (Microsoft, Borland, Watcom and GCC compilers; Microsoft Visual Studio, Borland C++Builder, KDevelop IDEs); Pascal/Object Pascal (Borland compilers, Borland Delphi, Borland Pascal IDEs); Java/Java Script/JScript/VB Script; C# (Microsoft CLI compiler, Microsoft Visual Studio IDE); Lisp, Prolog, Fortran; Compiler generators (Lex, Bison).
- Computer hardware: assembling, repairing, upgrade, maintenance.
- Networking: planning and deploying Ethernet networks; network maintenance; DHCP and DNS configuration; NAT and VPN service configuration; Internet and Intranet configuration for private networks; Firewall software installation and configuration, good TCP/IP stack knowledge (IP, TCP, UDP protocols).

PERSONAL DATA

Name: Sergey B. Voinov
Date of birth: September 9, 1981
Place of birth: Moscow, Russian Federation
Marital status: Single
Nationality: Russian
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EDUCATION

- 1998-2003 Russian State Institute of Technology, Faculty of Information Systems and Technologies, Department of Information Technologies. Master of Science in Software Engineering. Major area: software engineering. Minor area: digital signal processing. Diploma with honors. GPA: 5.0.
- 1995-1998 Moscow Industrial College, Department of Software Engineering. Diploma with honors. Major area: software engineering. Minor area: computer hardware maintenance. GPA: 5.0.

EMPLOYMENT

December 2012 – Present time

Institute of Problems of Chemical Physics of Russian Academy of Sciences www.icp.ac.ru.

Senior Engineer.

Programming, debugging, repairing and maintaining microprocessor-driven high-vacuum machines.

June 2010 – Present time

Forte-CT Co. Ltd. (Russia) www.forte-ct.ru.

Senior software engineer.

Design and implementation of new software for 3G telecom networks (video streaming services, UIVR platform). Support of existing software products (customer interaction, bug fixes).

December 2009 – May 2010

Samsung Electronics, South Korea www.samsung.com

Senior Engineer

Research, design and implementation of new algorithms for future versions of Flash memory cards software layer (Flash Translation Layer).

June 2007 – December 2009

Intel Corporation Russia www.intel.com

August 2009 – December 2009. Senior software engineer at R&D team working on new, massively parallel, processor architecture research project. Design and implementation of new algorithms for Intel's brand new processor architecture involving binary translation.

January 2009 – July 2009. Senior software engineer at Intel Itanium Compiler Moscow team.

Responsibilities: support for code generator component of the commercial product compiler (world's highest SPEC rate of 117 on HP Itanium cluster). **Main accomplishment:** got group recognition award for reducing backlog (number of open bug trackers) to zero; greatly improved compiler C++ exception support.

October 2008 – December 2008. Senior software engineer at Intel Parallel Advisor Moscow team.

Responsibilities: design and implementation of runtime support for the whole project. **Main accomplishment:** some of the runtime modules written by me were not only successfully used in the project, but were also considered to be used as parts of common infrastructure for Intel Parallel Studio suite.

July 2008 – September 2008. Project leader of dynamic optimizations group. Responsibilities: coordinating all activities inside the team to accomplish its key results; performing research and development of software prototypes. **Main accomplishments:** the team has successfully completed all of its key results; developed dynamic optimization prototype served as the basis for other BT projects at Intel.

April 2008 – June 2008. Senior software engineer at dynamic optimizations group. Responsibilities: researching hardware and software possibilities for runtime dynamic optimizations. **Main accomplishment:** the results of my research (a set of documents, performance data, etc.) directed the team to develop specific optimizations while avoiding wasting time for not beneficial ones.

January 2008 – March 2008. Project leader of unified BT infrastructure team. Responsibilities: interaction with local and foreign R&D and product teams; coaching and mentoring team members; coordinating all activities inside the team (developing, testing, bug-tracking, etc.); writing technical requirements and test plans; developing project infrastructure; implementing the most critical parts of the project. **Main accomplishments:** since the project was new to all the team members, I quickly established good technical expertise by coaching, and the technical documents I wrote served as the basis to the future project development.

June 2007 – December 2007. Senior software engineer at IA-32 binary translation department. Responsibilities: developing runtime environment of IA-32 binary translator project; support of instrumentation and emitter phases of the binary translator. **Main accomplishment:** the runtime environment which I developed enabled brand new BT project development, which is in Intel roadmap for year 2014.

Performance summary: got “Exceeds Expectations” mark as the result of annual employee performance review in April 2008.

November 2002 – June 2007

Forte-IT Co. Ltd. (Russia) www.forte-it.ru.

Senior software engineer and system architect.

Responsibilities: developing distributed architecture of Interactive Voice Response system; software development for computer telephony applications; high-level scripting language, compiler, IDE and runtime environment development and implementation. **Main accomplishment:** I have developed and implemented about 50% of the whole IVR system kernel; the system itself is successfully used today in more than 20 regions of Russia as a platform provided by one of the largest Russian mobile operator Beeline (www.beeline.ru).

September 2001 – February 2007

Russian State Institute of Technology (Russia) www.mati.ru.

Senior Tutor.

Responsibilities: lecturing courses “Computer Architecture and Organization”, “Computer Graphics”, “Operating Systems”, “System Software”; supervision of undergraduate students; assisting at academic and science conferences. **Main accomplishments:** course materials developed by me were successfully used in course programs and seminars for more than 5 years; the materials also served as a basis for remote learning programs provided by other universities.

CERTIFICATIONS

- [Microsoft Certified Professional \(MCP\) Certificate](#), October 2002.

PUBLICATIONS / CONFERENCE PAPERS

Title	Journal / Proceedings
Applications of Binary Translation systems for SW and HW platforms	Proceedings of the annual international students' conference “Gagarin's Readings”, Vol. 4, p25-26, 2008

compatibility	
System Software course materials for students	Russian State Technological University, 2005
A new classification of computer graphics algorithms	Proceedings of the annual international students' conference "Gagarin's Readings", Vol. 5, p16-17, 2004
Audio formats conversion program	Proceedings of the annual international students' conference "Gagarin's Readings", Vol. 5, p14-15, 2003
Applications of Intel x86 software emulators	Proceedings of the annual international students' conference "Gagarin's Readings", Vol. 5, p12-13, 2002
Computer Architecture and Organization course materials for remote learning students	Institute of new forms of education, 2002

PROFESSIONAL SOCIETIES MEMBERSHIP

- IEEE
- ACM

You can also view my profile at LinkedIn and [Moikrug](#) professional networks.

AWARDS/GRANTS

2009, Intel Corp., Intel Compiler and Languages Award (group award). Accomplishment: Itanium Compiler ECG team brought associated Cr+H stability backlog from more than 35 early in the year to zero. This by far surpasses initial expectation for the new team to maintain bug backlog at current level.

2003, Russian State Technological University, "The best graduate students of Moscow educational institutions" title and certificate.

PATENTS

Coauthor of "Method and apparatus for dynamic performance improvement by using data prefetching", Intel Corp., 2008.

REFERENCES

Available upon request.