George M. Ruban
133 Claflin St, Belmont, MA 02478
George_Ruban@yahoo.com

OBJECTIVE: Senior, principal, or team lead software engineering position.

PROGRAMMING LANGUAGES: Java, JavaScript, C, C++, CSS, HTML,CGI, UNIX Bourne, Korn shell scripts, XML. Some: Visual Basic, TCL, PostScript, Python, Lisp, SQL, Delphi, SAS, JavaCC, Waba, Lex, YACC, several Assembly Languages.

OPERATING SYSTEMS & PROGRAMMING ENVIRONMENTS: UNIX (Ubuntu, AIX, SGI, Solaris, SunOS, SCO Unixware), Microsoft Windows, Linux, PalmOS, MacOS; AccuRev, ClearCase, CVS, Eclipse, JDK, Khoros, MPW, Oracle Server, Purify, Rogue Wave Tools++, Sun Workshop, MS SQL Server, Perforce, Visual C++, Visual Source Safe.

PROFESSIONAL EXPERIENCE:

Google, Inc. Cambridge, MA. 02/2008-present
Software Engineer: Google Images, Groups, FriendConnect, Project Sunroof.

- Google Images: Image Search
  - Added free licensed image search to Google Images
  - Implemented "Strobe": infinite scroll redesign of Google Images, from page by page results.
  - Patent number 8990201 for filtering medical image results.
  - Images Result Panel/Carousel, detailed view of image results with metadata.
  - Images Weighted Layout: larger image thumbnails on mobile results screen.
  - Maintained Google Search App, Android native Images viewer.
  - Team lead for Images Mobile front end, 6 engineers
- Project Sunroof, evaluating houses for solar panels. Project won United Nations award.
  - Senior UI engineer Rewrote user interface, oversaw launch..
  - SunAPI - releasing Project Sunroof data to solar installers.
  - Solar savings estimator, Google Search onebox.
- Interviewing software engineer candidates: about 150 interviews.

Environment: Ubuntu Linux, Android. C++, Java, JavaScript, CSS, HTML, Google Earth Engine, Google App Engine, Python, CloudSQL. Perforce, Git source control.

ITA Software, Inc. Cambridge, MA. 01/2007-01/2008
Senior Software Engineer: QPX, award winning airfare search engine

- Maintaining, optimizing and expanding QPX low fare search
- Parallelizing retrieval of seat availability, for 10% speed improvement.

Environment: 64 and 32 bit Red Hat Linux. Common Lisp, C++, XML, Korn shell scripts. Subversion source control, Bugzilla bug tracking, Wiki documentation.

Lavastorm, Inc. Boston, MA. 01/2006-01/2007
Senior Software Engineer: Brain and Visual CDR revenue assurance products

- Wrote and maintained Active X controls in Borland Delphi, embedded in IE HTML pages.
- Wrote and maintained data readers in SAS and Oracle SQL, and Python nodes with unit tests.
- Turned Brain documentation into online help.
- Led build for a major cross-platform Brain release with proprietary tools, helped document and automate process.

Environment: Linux, Solaris, Windows, HP-UX. Python, C++, MS Visual C++, Java 1.5, Borland Delphi, Bourne, TC shell scripts, SAS, Expert (proprietary language). Oracle 10 SQL. CVS revision control, Gnats bug tracking.

Avaya; formerly Spectel, Inc. Chelmsford, MA. 01/2002-01/2006
MTS, Engineer III; Principal Software Engineer, Team Lead

- Team Lead of BCAPI Group, 3-6 engineers developing the Bridge Control API and Conference Manager DTK, Java libraries and toolkits to control the CS700, 780, and 6100 Meeting Exchange real-time telephone conferencing bridges. Took over a group without func specs or project plan, introduced regular functional specification review procedure, first daily automated unit test runs in Avaya Conferencing, noticeably improved shipping code quality, and began meeting schedules. After 1 year, became the most reliable group in Avaya Conferencing. In charge of negotiating with SQA and Product Management, scheduling, assigning tasks, reviewing functional specs and code, as well as substantial individual contributions.
- Technical lead for S700 3.3 project, overseeing entire Spectel-Andover engineering group (~15 engineers) developing a major delivery, including Informix SQL database, multi-language prompt sets, and integrating a customer API application. Met with clients, designed, oversaw development and documentation, and delivered on time.
- Lead bridge engineer on MultiSite project, C++ on Windows program integrating multiple bridges to carry a single conference. Took over project which failed to deliver in 9 months, redesigned and rewrote from scratch, successfully met goals and delivered in 3 months.
- Senior engineer on 3.0 project, delivering "Flex Flow", emulating rival platform call flow, while improving architecture by rewriting single-threaded call handler process from legacy C table-driven state machines to maintainable and expansible C++ multiple stack based call flow classes. Aided in design and C++ syntax, met with clients, prototyped on Windows, completed on bridge.
- Documented bridge development process; made custom RCS commands menu-driven with Emacs scripting; interviewed dozens of prospective new hires; supported newer developers.

Environment: SCO Unixware (real-time Unix OS), Linux, Windows 2000; C++ with STL (Standard Template Library), Java 2: JDK 1.3, 1.4; J2EE: JMS, JNDI, JBoss; Bourne and Korn shell scripts, Emacs Elisp, Windows Batch files, Informix SQL; Apache Ant build/make tool, log4j logging, JUnit automated testing; Eclipse, JBuilder, Visual C++, Emacs IDEs; AccuRev, MKS RCS, Visual Source Safe source control; Purify, Quantify.

Fidelity, Inc. Boston, MA. 09/2000-11/2001

Consultant: eBusiness Accounts and Trade group.

- Main C++ developer for the Money Movement Encina Web server. Worked on Trader, Account, and Basket servers, enabling deposits, withdrawals, stock and mutual fund trading.
- Lead server developer on multiple online projects, including Immediate Funding (setup of bank accounts for money transfer to Fidelity accounts), IRA withdrawals and directed contributions.
- Main front end developer FTPS projects, moved Trader and MM server communication with back end databases from proprietary interface to B2B compliant XML for Level 1 Mutual Fund accounts.
- Led debugging memory leaks, core dumps, and compiler warnings. Supported newer developers.

Environment: Sun Solaris Unix; Windows NT; Sun Workshop, Purify; C++, XML, HTML, JavaScript, Bourne and Korn shell scripts, Informix SQL.

Genuity, Inc. (formerly GTE Internetworking) Waltham, MA. 02/1999-09/2000

Consultant: EIP group, COMIT Voice Over IP gateway/gatekeeper provisioning project.

- Created C++ and ProC program to run large scale varied tests of telephone numbers on VOIP gateways, using database storage, Telnet and Expect connections to gateways, modems and call simulators. Ported to Java 2, using Java Telnet and Expect libraries from previous GTE project. Instructed group in use.
- Maintained and extended shared COMIT C++ and Java class libraries. General Java advice as needed.

Environment: Sun Solaris Unix; Windows NT; Oracle 8 for Solaris, Sun TeamWare source control. C++; Oracle ProC; Oracle SQL; Java 2 (JDK1.2-1.3); Bourne Shell Scripts; Perl CGI; Visual C++.

NeTegrity, Inc. Waltham, MA. 08/1998-01/1999

Consultant: SiteMinder Web site access control software.

- Adapted SiteMinder to use Windows NT Oracle and MS SQL Server databases via ODBC. Supported SiteMinder port from NT to Solaris, using Bristol WindU, Intersolv Oracle ODBC driver.
- Developed LDAP database conversion utility, for NT and Solaris. Maintained, enhanced, and documented existing data object import/export utilities.

Environment: Microsoft Visual C++; Windows NT; Sun Solaris; Oracle 8 for NT and Solaris; SQL Server; ODBC; ERWin abstract schema design tool; Netscape Directory Server; LDAP; Bristol WindU; Visual Source Safe.

Teradyne, Inc. Boston, MA. 09/1997-08/1998
Consultant: Multimedia Software group, IMAGE project, automating testing of chip testing software.

- Designed multiple X-Windows (Sun XView) GUI applications, including a front end for an existing command line tool, and an Executive coordinating all other Teradyne IMAGE digital tools.
- Added Event Recording & Replaying capability to these and existing X-Windows GUIs, to save user actions, such as mouse clicks and menu choices, to files for automated GUI testing.

Environment: UNIX: Solaris 2, SunOS 4; X-Windows: XView, C, C++, Bourne Shell (sh); ClearCase revision control system.

GTE Laboratories Waltham, MA. 01/1997-09/1997
Consultant: Digital Services Test Systems group, qualifying telephone lines for ADSL installation.

- Wrote 2 Java, C, and CGI clients for remote database servers, operating via TCP sockets, X25, Telnet, and/or proprietary Assoc interface, with out-of-band (OOB) socket data.
- JavaCC parser for reading loosely formatted data, 2 Java daemon applications to gather and republish data from remote hosts via Telnet, FTP, and HTTP.
- Implemented Telnet and Expect-like protocols in Java. Maintained C++ line testing software.
- Administered CVS revision control system. Developed group programming, code management, and documentation standards. Advised group on Java and CGI programming.

Environment: UNIX (IBM AIX); Java (1.02), CGI, HTML, C++, C, JavaCC, CVS.

ALPHATECH Inc. Burlington, MA. 07/1995-09/1996
Software Lead: Search module, MSTAR model-based image recognition program.

- Designed and implemented 2 initial Search processes using TCP sockets to get around Khoros data flow limitations. Built complex GUI in Khoros for X-Windows. Designed the PEMS Testbed: expanding Search code to give other module developers simple programming interface to MSTAR.
- Led software team of 6 engineers in 3 companies (ALPHATECH, MA; Lockheed Martin, CO; Booz-Allen Hamilton, CA). Coordinated quarterly deliveries, documentation (~250 pp), and demonstrations.
- Coordinated ~250 page documentation for each delivery, created first company World Wide Web pages.
- Secret Security Clearance while in ALPHATECH.

Environment: UNIX: SunOS, SGI, Solaris; C, C++, HTML, Khoros 2, Purify, FrameMaker.

Delos Corporation Billerica, MA. 08/1994-06/1995
Lead Software Engineer, vMax voice recognition system for industrial communication. Real time program linking users in a noisy factory wearing radio headsets to a dedicated 486 PC.

- Designed and prototyped in Borland Turbo C++ for Microsoft Windows 3.1, using SoundBlaster sound card, IBM MWave phone card, and Verbex voice recognition software.
- Led subsequent team of 3 engineers developing the system, as installed in several factories.

Environment: Windows 3.1, Borland C++; SoundBlaster, IBM MWave, Verbex Listen.

TeleTypesetting Co. Brookline, MA. 02/1993-12/1993
Software Engineer, maintaining the TScript PostScript Interpreter for the Macintosh.

- Moved the graphics rendering engine from Assembly to C, with 50% performance improvement.
- Implemented PostScript features including compression filters, graphics patterns and color spaces.

Environment: Macintosh, Macintosh Programmer's Workshop; C, 68000 Assembly, PostScript.

EDUCATION:
B. A. Computer Science, Boston University, Summa Cum Laude with Distinction, 05/95.
GPA: 3.94/4.00. SAT: 800/800 English, 760/800 Mathematics. First in graduating Computer Science class. Computer Science Class Valedictorian. Dean's List every semester. Phi Beta Kappa Honor Society.

OTHER: College French, fluent Russian, beginning Spanish.