George Ruban

Software Engineer - Google, Inc

Belmont, MA - Email me on Indeed: indeed.com/r/George-Ruban/220f192204acd188

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, Visual C++, Visual Source Safe.

WORK EXPERIENCE

Software Engineer

Google, Inc - Cambridge, MA - February 2008 to 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.
Led team of 6 Image Search UI 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.

Senior Software Engineer

ITA Software, Inc - Cambridge, MA - January 2007 to January 2008

QPX, award winning airfare search engine

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

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

Senior Software Engineer

Lavastorm, Inc - Boston, MA - January 2006 to January 2007

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.
● Wrote half dozen Python nodes with extensive automated 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.

MTS, Engineer III; Principal Software Engineer, Team Lead

Avaya - Chelmsford, MA - January 2002 to January 2006

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.

Consultant

Fidelity, Inc - Boston, MA - September 2000 to November 2001

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.

Consultant

Genuity, Inc - Waltham, MA - February 1999 to September 2000

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

● Created C++ and ProC program to run large scale tests of telephone numbers on VOIP gateways, inbound and outbound, under a variety of conditions, using database data lookup and storage, Telnet and Expect connections to gateways, modems and call simulators.

● Ported same program to Java 2, using Java Telnet and Expect libraries from previous GTE project.

● Wrote Expect (TCL), Bourne Shell Script (sh), and Windows C++ programs for smaller projects.

● Instructed EIP group in use of Java Telnet and Expect libraries. 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++.

Consultant

NeTegrity, Inc - Waltham, MA - August 1998 to January 1999

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; Intersolv ODBC Oracle driver; Microsoft SQL Server; ODBC; ERWin abstract schema design tool; Netscape Directory Server; LDAP; Bristol WindU; Microsoft Visual Source Safe.

Consultant

Teradyne, Inc - Boston, MA - September 1997 to August 1998

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 GUI tools, to save user actions, such as mouse clicks and menu choices, to a file for later non-interactive replay.

● Wrote modular Bourne Shell test scripts that replayed representative test sequences of program GUI controls, including edge cases.

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

Consultant

GTE Laboratories - Waltham, MA - January 1997 to September 1997

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.

● Created complex JavaCC parser for reading loosely formatted data. Wrote two Java daemon applications to automatically 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.

Software Lead

ALPHATECH Inc - Burlington, MA - July 1995 to September 1996

Search module, MSTAR model-based image recognition program.

● Designed and implemented 2 initial Search processes using TCP Internet Sockets to get around Khoros data flow limitations. Built complex GUI in Khoros for X-Windows.

● Led software team of 6 engineers in 3 companies (ALPHATECH, MA; Lockheed Martin, CO; Booz-Allen Hamilton, CA). Coordinated quarterly deliveries and demonstrations.

● Designed the PEMS Testbed: expanding Search code to give other module developers simple programming interface to MSTAR. Led 3 engineer implementation team.

● Coordinated formal, detailed Search software documentation (User's Manual, Programmer's Manual, Test Description, Test Report, ~250 pages) for each delivery. Created and maintained the ALPHATECH MSTAR World Wide Web pages with software, papers, and documentation.

● Secret Security Clearance while in ALPHATECH.

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

Lead Software Engineer

Delos Corporation - Billerica, MA - August 1994 to June 1995

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 the program in Borland Turbo C++ for Microsoft Windows 3.1, using the Object Windows Library (OWL), SoundBlaster sound card, IBM MWave WindSurfer FAX/TAM phone card, and Verbex speaker-independent 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.

Software Engineer

TeleTypesetting Co - Brookline, MA - February 1993 to December 1993

maintaining the TScript PostScript Interpreter for the Macintosh.

● Moved the entire graphics engine, rendering the bitmaps, from Assembly Language to C. Achieved a 50% overall performance improvement despite higher level language.

● Implemented features of Level 2 PostScript, including 7 data compression filters, graphics patterns and color spaces.

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

EDUCATION

B. A. in Computer Science

Boston University
May 1995

ADDITIONAL INFORMATION

Summa Cum Laude with Distinction, 05/95. Grade Point Average: […] First in graduating Computer Science class. Computer Science Class Valedictorian. Dean's List every semester. Phi Beta Kappa Honor Society. Golden Key Honor Society. SAT: 800/800 English, 760/800 Mathematics.

Spoken languages: College French, fluent Russian, beginning Spanish.