## George M. Ruban 133 Claflin St, Belmont, MA 02478 GeorgeRuban01@gmail.com

**OBJECTIVE:** Senior software engineering position.

**PROGRAMMING LANGUAGES**: C, C++, CSS, HTML, Java, JavaScript, React, TypeScript, SpringBoot. Some: Assembly languages, Lisp, PostScript, Python, SAS, SQL, TCL, UNIX shell scripts, Visual Basic, XML.

**OPERATING SYSTEMS & PROGRAMMING ENVIRONMENTS:** UNIX (multiple), Microsoft Windows; AccuRev, CVS, Eclipse, Git, Gitlab, JDK, Oracle Server, Perforce, Purify, SQL Server, Visual C++, VS Code.

## PROFESSIONAL EXPERIENCE:

**Kessel Run** Hanscom Air Force Base, MA 07/2023-current Principal Software Engineer, contractor, via Clarity Innovations. Full stack engineer.

- Developing KRADOS suite of Air Force Operations Center planning software.
- Supporting less experienced engineers.
- On own time, but with KR approval, wrote Kessel Run Wikipedia article.

Environment: React, Recoil/MobX, TypeScript, Java Spring Boot, Docker, MUI. Gitlab, Git source control.

Microsoft, Inc. Cambridge, MA. 05/2017-05/2023

Senior Software Engineer: Microsoft Office, Docs File Operations, common parts of Office suite dealing with the file interface, MRU (recent documents), templates, and the OutSpace Home, Open, and New pages.

- Became group go-to person for document templates: paths, storage, and UI navigation.
- Rewrote the Friendly Path algorithm, translating MRU display from often hexadecimal URL to user friendly folder names based on asynchronous server mappings, added multiple caches for speedup.
- Main front end developer of Organization document templates, allowing enterprises to standardize document styles across their company.
- Supported migration of Windows Documents directory to OneDrive in MRU and template paths.
- Wrote initial version of Fluid framework Google Docs link unfurling.
- Multiple UI accessibility fixes, for navigation, contrast, and screen reader support.
- Debugged and fixed or mitigated many heap dumps from Office application crashes: never from my code!
- Helped onboard newer and less experienced team members; reviewed code; interviewed; added unit tests for new and legacy code. Part of Hackathon team which won honorable mention for video comments.
  Participated in and led two book review groups. Organized and won team building competitions.
- On own time, but from requests from Microsoft CELA, wrote and taught others to write Wikipedia articles for Microsoft president Brad Smith, Kathleen Hogan, Kevin Scott, Chris Capossela, and Kurt DelBene.

**Environment**: Microsoft Windows 10, 11. C++, TypeScript. Visual Studio. Perforce, Git source control.

**Google, Inc.** Cambridge, MA. 02/2008-04/2017

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, Angular. Perforce, Git source control.

**ITA Software, Inc.** Cambridge, MA. 01/2007-01/2008

Senior Software Engineer: QPX, award winning airfare search engine

**Lavastorm, Inc.** Boston, MA. 01/2006-01/2007

Senior Software Engineer: Brain and Visual CDR revenue assurance products

Avaya; formerly Spectel, Inc. Chelmsford, MA. 01/2002-01/2006

MTS, Engineer III; Principal Software Engineer, Team Lead. Telephone conferencing bridge.

- 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.

**Genuity, Inc. (formerly GTE Internetworking)** Waltham, MA. 02/1999-09/2000 Consultant: EIP group, COMIT Voice Over IP gateway/gatekeeper provisioning project.

## **EDUCATION:**

B. A. Computer Science, Boston University. Summa cum laude, first in class and valedictorian.

**OTHER:** College French, fluent Russian, beginning Spanish.