# Todd Vierling, Senior-Level Software Engineer and Architect

Atlanta, GA, USA // E-mail (recommended!): **tv@pobox.com** // Direct +1-404-492-9082 Online résumé: linkedin.com/in/tvierling

### Objective and Background

My career goals continue in software engineering, in team-lead and possibly management roles, but still with hands-on tasks. My experience is firmly rooted in backend/middleware applications and networking. I tend to put my all into my work, so my target position would be permanent, contract-to-hire, or long-term contract, ideally within the **in-town Atlanta**, **GA area**. (I am not looking for relocation at this time.)

I am a programmer of most modern languages, with a particular emphasis on **Java and C/C++**; a decade-plus seasoned **Unix/Linux** engineer; project manager; and people manager. In addition to expansive technical expertise of a "hard-core coder", I have an understanding of real-world aspects of projects necessary for effective management.

### Employment History

Information on positions and projects prior to 1998, as well as expansive detail about positions listed here, can be found at the LinkedIn profile link at the top of this résumé.

Damballa, Inc.

July 2010 — October 2011

Software Engineer

Developed and maintained software for embedded network security systems, using C++, Java, Ruby, embedded systems, CouchDB, Hadoop, and more.

#### **Internap Network Services Corporation**

September 2002 — July 2010

Sr. Manager, Software Engineering [October 2006 – July 2010]

Sr. Software Engineer [September 2002 – October 2006]

Maintained and extended Internap's custom IP routing solution forming the backbone of Internap's IP connectivity products, using Java and C++ with PostgreSQL and Oracle databases. This suite included a custom BGP4 implementation and unique performance metric techniques. Personally added IPv6 support to the software core, reduced the code footprint by a factor of four, and optimized legacy code into an efficient and maintainable form. Additional tools used included JPA, Maven2, Eclipse.

Continued in this position as a project manager, and manager of a Software Engineering group, while still retaining core programming duties. Researched Scala, GWT, Google App Engine, and other emerging technologies for applicability to next-generation product offerings.

#### The NetBSD Foundation

November 1997 — December 2007

Software Developer (Open Source Volunteer)

Served as a software developer on the NetBSD open-source Unix operating system for more than ten years, working with many processor architectures, using C, C++, and Java. Oversaw the 1.5 release branch and releases, and worked extensively on the "pkgsrc" software packaging system.

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# Wasabi Systems

July 2000 — July 2002

Software Engineer

Ported the NetBSD (BSD Unix-based) OS platform to then-emerging embedded devices based on MIPS and ARM cores. Added device drivers, maintained compiler toolchain, and debugged kernel and userlevel code at both source and machine code levels. Worked with C and C++ tools (gcc, gdb) on NetBSD and Linux, and JTAG hardware interfaces.

#### **BellSouth Cellular**

July 1999 — July 2000

Software Engineer

Developed new point-of-sale UI and backend for retail stores, using Java and Swing (early prototypes used C++ with CORBA), with databases in all of DB2, Oracle, and Sybase systems.

Xerox

January 1998 — July 1999

Software Engineer

Developed a hardware and software interface between Xerox high-volume printing products and legacy IBM mainframe systems (OS/390 and OS/400). Included hardware TTL level debugging as well as Solaris kernel driver development in C.

### Industry Involvement

- USPTO patent applications pending (12/572,290 and 12/572,295) covering enhanced methods of classification and analysis for Netflow data records
- Regularly involved in, and develop changes for, major open source software projects, including Ubuntu and Debian Linux, Apache HTTP server and other Apache projects, Google Chrome and Chrome OS, the Scala programming language, and many more
- Previously involved in other major open-source community projects, including the GNU Compiler Collection, Wine, Sendmail, and ISC BIND
- Worked with KAME Japan to refine their industry-standard IPv6 network protocol stack and help integrate it with NetBSD and other OS's
- Participated in fora to design emerging Internet technologies such as IPv6, BGP4+, SPF, and more through IETF and other organizations

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### Technology Experience Brief

(This table is nowhere near exhaustive, but is representative of the strongest skills.)

### Software Development

15+ years	С	Unix, embedded/RTOS
15+ years	SCM tools	CVS, Subversion, git, others
15+ years	Script programming	Perl, Bourne shell, etc.; PHP
14 years	C++	Unix; STL & Boost libraries
13 years	SQL	MySQL, PostgreSQL, Oracle, others
12 years	Web development	HTML, CSS, JavaScript, AJAX

10 years Java J2SE & J2EE; many toolsets and libraries 1 year Scala and Lift; contributed to main distribution

### Networking Technologies

15+ years TCP/IP IPv6, multicast, routing (BGP, OSPF, etc.)
14 years Network hardware Cisco and other vendors

### Operating Systems and Hardware

15+ years	Unix administration	Linux, Solaris,	*BSD, HP-UX,	others
12 years	Unix-Windows integration			
9 years	Windows administration			
9 years	Virtualization	VMware, Xen		

### Architecture and Management

6 years	Information security	Intrusion detection, policy management
4 years	Project management	

### Recent Skills Expansion/Research

Studied (either as part of research for work, or as personal enrichment) a number of newer technologies to add to the core skill set, including:

- Scala and Groovy, as alternative programming languages to Java
- Hadoop (and Amazon Elastic MapReduce)
- NoSQL, via CouchDB

#### Other Information

Formal education: University of Florida, Gainesville, FL – major Electrical Engineering.

Some recommendations are visible on the LinkedIn profile provided at the top of this page. Additional direct references available upon request by hiring personnel.