

# Charles A. Hitselberger

Software Developer

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## SUMMARY

Experienced (25+ years) Software Developer and Engineer. Proficient in Java/JEE, Unix, Windows, Perl, shell scripting, comfortable with many other languages and tools. Strong experience areas in telecommunications and finance. Adept at exploring and refactoring legacy and undocumented code to meet current business goals.

## SKILLS

### Languages:

Java / JEE  
Ruby on Rails  
Perl  
bash / sh / zsh  
Visual Studio .NET  
C / C++ / C#  
Borland Delphi  
Pascal  
Visual BASIC  
several dialects of BASIC  
x86 assembler  
Forth  
et al...

### Web Technologies:

HTML  
WSDL  
SOAP  
Axis  
CSS  
XML  
Tomcat  
Apache2 HTTPD

### Database:

Oracle  
mySQL  
sqlite  
PostgreSQL  
FileMaker Pro  
Pointbase  
Access  
FoxPro  
RMS (OpenVMS)

### Operating Systems:

Windows--3.x / 95 / 98 / ME  
/ NT / 2000 / XP / Vista / 7  
Unix--Linux / Free BSD /  
Solaris / HPUNIX / SCO  
OpenVMS

### Networking:

TCP/IP  
Cisco Routers  
Samba  
Virtual Private Networks  
IPX/SPX & NetBEUI  
Decnet

### Java Tools & APIs:

Maven & Maven2  
Ant  
JUnit  
JMF  
SIP  
RTP  
JSP  
JavaScript  
Velocity  
JAXP  
SAXP  
Eclipse IDE  
Netbeans IDE  
Sun Studio ONE IDE  
Jetspeed 1.5 & 2 portal  
Liferay portal  
Mocha decompiler  
Servlets  
Applets  
Spring MVC  
Hibernate  
Struts  
Design Patterns

## EXPERIENCE

### Sure Secure Solutions, McLean, VA

Software Engineer

AUG 2011 to Present

- Worked onsite using NextAxiom's Hyperservice Studio and Service Runtime Engine middleware platform to do back-end programming for Dept. of Energy's "Paperless Work Package project" at Savannah River Site near Aiken, SC
- Integrated anything-to-PDF conversion into PWPP
- Ruby on Rails 3 development for front end interface to Next Axiom SOA middleware
- Virtual private network (VPN) setup (openvpn); cloud deployment (Amazon EC2 and Slicehost); Virtualization (qemu and Oracle VirtualBox)

### chitselb.com

Independent Consultant

DEC 2008 to Present

For the following clients, developing in Java, J2EE with Spring and Hibernate:

- Graceroute.com, Gaithersburg, MD, Software Engineer
- BlinkMind, Katy, TX, Software Engineer
- Comcast, Herndon, VA, System Administrator

**Northrop Grumman, Fairfax, VA****AUG 2008 to NOV 2008****Software Engineer**

Member of Defense Travel System (DTS) configuration management group

- Performed application builds on development, testing, integration, customer acceptance and production platforms.
- Worked on Java application to automate configuration file generation
- Increased automation of build tasks, configuration generation, and post-build error checking.

**BuildTopia, Rockville, MD****MAR 2008 to MAY 2008****Software Engineer**

Worked in a small team using agile/scrum methodology for designing new web application for social networking and accounting in the building and construction industry.

- Configured continuous integration environment on a Linux server using Hudson, Ant, Maven 2, and subversion.
- Designed and normalized Oracle 10g database.
- Developed J2EE software using Spring MVC framework, Hibernate, Struts, HTML, Javascript, and JDBC
- Installed and deployed application on Apache Tomcat.

**Lockheed Martin, Alexandria, VA****NOV 2007 to FEB 2008****Software Engineer**

Member of applications team, providing new development and support for several existing dcma.mil financial applications. Worked in Oracle 10g and Oracle 9i on Windows XP and Solaris platforms, mostly on "Overhead" application. Applications were implemented in J2EE using Eclipse, Oracle BC4J, JSP, Spring MVC, Hibernate and Struts. Deployment was continuous integration using Tomcat, Ant, subversion and Hudson

- Wrote Ant scripts to automate build processes as part of continuous integration environment.
- Fixed Overhead bug in production and load test environments (un-reproducible in development and system test environments) caused by Oracle security patch changing a BC4J library interface.
- Used forensic techniques to recover application source code from previous DCMA vendor.
- Updated logging to use commons-logging instead of log4j

**SightLine Systems, Inc., Fairfax, VA****APR 2007 to NOV 2007****Software Engineer**

- Performed bugfixes, feature enhancements, and testing on SightLine Agent Administrator, a J2EE web application that allows users. Introduced JUnit test cases to this application.
- Replaced Java listener on SightLine Power Agent (SLPA) with C++ listener, to reduce client footprint, improve speed, and eliminate JVM incompatibility issues.
- Built, installed, and tested kits on all supported platforms.
- Configured OpenVMS development environment on Itanium64, Alpha, and VAX systems.
- Rewrote Intersystems Caché interface module to OpenVMS SLPA using Caché Object Script (MUMPS).

**Broadsoft, Gaithersburg, MD****APR 2006 to NOV 2006****Software Engineer**

Software Engineer on Broadworks Execution Server team.

- Primary developer of Broadworks releases 14 Directory Number Hunting feature, from software architecture to system test.
- Propagated features and bugfixes into older releases of Broadworks.
- Analyzed and repaired bugs. Wrote function specifications and unit test plans.
- Authored high level design documents and other documentation as needed.

**Verisign, Sterling, VA****SEP 2005 to DEC 2005****Software Engineer**

- Added contact validation feature to dotTV website and database, using postal code lookup, E164 for phone, and mail server DNS lookup to qualify customer contact

information.

- Performed quality assurance role on two releases of www.tv website and one release of www.greatdomains.com website. Ran ad hoc database queries for marketing group.

### **MCI, Ashburn, VA**

**JUN 2005 to AUG 2005**

#### *Software Engineer*

- Developed system to provide BellSouth with database abstract, combining subscriber inter-county tariff data from five different sources into a flat file, including reliable secure transport and end-to-end data validation.

### **Nextel, Inc., Mclean, VA**

**NOV 2004 to FEB 2005**

#### *Software Engineer*

Maintained and upgraded NERFSTAT (Northeast Radio Frequency Statistics) used by Nextel radio engineering group to monitor cell tower performance in near real-time. Environment was Red Hat Linux, Perl

- Added "neighbor" statistics using MySQL tables instead of flat files used by legacy application.
- Upgraded Red Hat on Philadelphia/Baltimore/Washington Server to support Perl/MySQL.
- Took a crash course in Perl and the design of the preexisting software sources in order to fix several previously existing bugs.
- Reorganized sources to use one code base instead of four.

### **BroadVoice, Lowell, MA**

**APR 2004 to JUL 2005**

#### *Software Engineer*

Team-of-one software engineer. Designed/developed/tested the following projects:

- Caller name server puts caller names in subscriber phones as part of Caller ID. Uses SIP to communicate with application server and Southern New England Telephone Company. Designed MySQL database to manage long-term storage
- Created SOAP service using Apache Axis to provide custom caller name information to web portal and OSS platform
- TollFree server using Java/MySQL to validate incoming calls to subscriber toll-free numbers.
- Web portal based on Apache Jetspeed 1.5, JSP and Velocity. Provides subscribers access to call detail, billing, VoIP service feature control and account information. Analyzed another developer's Visual C# source code to incorporate structure of OSS backend database into Java.
- Used existing OSS platform web services to read and update subscriber data from the web portal
- Quality of Service system, measures jitter, packet loss and throughput bandwidth statistics using SIP and RTP, with MySQL as a backing store

### **Anvicom, Inc., Vienna, VA**

**JUN 1999 to JAN 2004**

#### *Software Engineer*

Maintain three key legacy financial applications onsite for the Federal Aviation Administration. Invoice Tracking System (ITS) and Budget Accounting System (BAS) are both implemented in Foxpro. Overflight Accounts Receivable Management Information System (OARMIS) is a billing system written in Borland Delphi. Provided high level help desk escalation support. Rebuilt OARMIS application from sources only, after collecting the necessary tools and libraries.

- Obtained missing object libraries from multiple vendors
- Rebuilt and modified original OARMIS sources to work with latest object libraries and Delphi 4
- Updated documentation for OARMIS, BAS and ITS, including a Programmer's Guide to OARMIS
- Substantial modifications to BAS application written in Foxpro 2.6 to support FEMA and post-9/11 Emergency Funding requirements
- Developed Java application to convert financial reports into useable Excel spreadsheets
- Reengineered ABA Correspondence Tracking System (ABACTS)

-- Prior experience and references available upon request. --