### Thomas M. Swiss 2119 Arlonne Drive Baltimore MD 21228 (410)455-5325 <u>tms@infamous.net</u> http://infamous.net/resume

## Summary

Senior software developer with twelve years experience, skilled in Unix, C, C++, computer security, the Internet (TCP/IP) protocol suite, and systems administration.

### Education

- M.S., Computer Science, University of Maryland, 1993
- B.S., Computer Science, University of Maryland, 1991; Citation in University Honors

## **Programming Languages**

C, C++, PHP; also some SQL, Perl, LISP, Bourne and C Shells, Pascal, and Java

## **Operating Systems**

Unix (AIX, Linux, OSF/1, NetBSD, SunOS, Ultrix, SCO CMW+, HP/UX CMW, Solaris, IRIX), Trusted Mach, MS-DOS

### **Technical Skills**

TCP/IP networking, Unix internals, Socket level programming, Object-oriented programming, XML, HTML, Unix system administration, Internet firewalls, Computer security, Trusted systems, Nuance speech recognition software, Mach microkernel

### **Hardware Platforms**

x86-based PC, RS/6000, SGI, SPARCstation, Sun 3, VAX, DECstation, HP 700 series

### **Professional Experience**

Linux Software<br/>DeveloperVerVendi (Silver Spring, MD)July 2003 - present

Performed maintenance, new coding, and systems administration for the Trocadero.com and Cyberattic.com websites, providing storefront services for antique, fine arts, and collectibles dealers. Designed and implemented customer testimonial system to track satisfaction with member merchants, and shopping cart software that interfaced with existing order processing system. C++ and PHP development on Linux.

Unix Software Developer <u>IBM Telephony Lab</u> (Annapolis, February 2001 - May

### MD)

2003

2000

September 1999 - June

(Contract position.) Performed integration of Nuance speech recognition software for a VoiceXML-based voice portal system. Developed parser/translator for speech grammars from JSpeech Grammar Format to Nuance's Grammar Specification Language. Participated in design of voice-activated dialing system to be built on top of this portal. Authored project-wide coding standards document. Worked on component integrating Trillium ISDN stack into IBM Resource Manager platform using XML messaging. C++ development on AIX.

#### June 2000 - January Webmagique (Ellicott City,MD) **Chief Engineer** 2001

Provided technical leadership (including systems administration, software development, and consulting) for a small web design and hosting company.

### **TRW Systems and Information** Unix Software Developer Technology Group (Greenbelt, MD)

(Contract position.) Developed and maintained software for EDOS (the Earth Observing System Data and Operations System), a NASA project. Designed and implemented new socket connection and messaging libraries for interprocess communication using TCP and multicast UDP. Development was in C on RS/6000 AIX and SGI IRIX systems.

#### **<u>IBM Telephony Lab</u>** (Annapolis, MD) **April 1999 - September Unix Software Developer** 1999

(Contract position.) Performed integration and debugging on software to control Summa Four telephone switches, using SS7 protocols. Participated in initial design of a voice-activated dialing system for Sprint PCS subscribers ("Voice Command"). Software ran on RS/6000 AIX systems and was written in C.

#### Norman Data Defense Systems July 1998 - February Lead Unix Developer (Fairfax, VA) 1999

(Contract position.) Worked independently off-site to provide all development, debugging, and code-level support for the Norman Firewall (see "Lead Unix Developer, Norman Development, USA" below) on Project Stargate, a joint effort with Hewlett-Packard. Handled Unix sysadmin duties for development network. Development was in C on HP platform.

#### Unix Software Developer Raytheon STX (Lanham, MD) April 1998 - July 1998

(Contract position.) Wrote control and interface software for custom high-speed serial interface board, data recorders, and data switch, for the Data Recording and Monitoring System of the China-Brazil Earth Resources Satellite Data Processing System. Software was written in C++ on an SGI Octane.

### Lead Unix Developer

### (Hanover, MD)

## Norman Development, USA

### February 1997 -February 1998

Lead Developer of the Norman Firewall, a application proxy firewall based on HP and SCO B1/CMW systems. Provided technical leadership for the development team. Performed primary development for port of firewall from HP and SCO systems to Solaris. Developed plans for refactoring the code base to improve the modularity and extensibility of the firewall without re-architecting, and for a Linux port. Handled Unix sysadmin duties for development machines. Programming was done in C.

# Computer ScientistTrusted Information Systems, Inc.<br/>(Glenwood, MD)December 1993 -<br/>January 1997

Assigned to the Trusted Mach project, developing a B3-targeted secure operating system base. Created system administration programs and a code library to support further development. Took over lead development of the Trusted Mach Trusted Shell component; planned and carried out a thorough redesign of that component. Created and maintained extensive design and interface documentation required for TCSEC evaluation. Responsible for administration of personal Unix workstation and development/test machine. Software was written in C++ on Intel-based platform.

Worked on the Polylith system for distributed software design, packaging and prototyping. Work was done in C on Sun and DEC Unix platforms.

#### Assistant Programmer <u>Lunayach Communication</u> <u>Consultants (LCC)</u> (Washington, <u>DC</u>)

Worked in a DOS environment with High C and Turbo C, developing in-house demographic plotting software for cellular phone markets.

Summer 1990

An updated version of this resume, and additional information, can always be found at <a href="http://www.infamous.net/resume">http://www.infamous.net/resume</a>

References available upon request.

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