

Thien-Thi Nguyen

Personal Data

Birthplace, date Saigon, Viet Nam, 1970-04-20
Citizenship United States
Postal Address Viale Allegra 26/C
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Skills

online portfolio <http://www.gnuvola.org/software/>
languages Scheme, Emacs Lisp, Common Lisp, Bourne shell, SQL, Texinfo, \LaTeX , Perl, Python, (X)HTML, CSS, Verilog, C, C++ , various asm
admin/config Debian GNU/Linux, X11, PostgreSQL, Exim, CVS
applications GNU Emacs, Inkscape, Firefox, OpenOffice, VLC

Professional Experience

2006 Upgrade Engineering, s.r.l., Milano
Software Engineer (contract)
Wrote custom TCP/IP server which supports mediated-star topology, automatic peer connection restart/upgrade, message size up to 300KiB, simple (DES) message encryption, private control channel (also used for change-of-status notification), whitelist authentication for both control channel and peers, scalable-multicast operation, integrated ICMP (ping). Developed under GNU/Linux. Wrote prototype and testing framework in Emacs Lisp. Wrote deliverable program in C. Wrote documentation (Italian) in Texinfo, delivered as HTML.

2002/10 – 2006 Factset Research Systems, Inc., Norwalk, CT
Software Engineer (contract)
Ported GNU Emacs 21.2 to OpenVMS 7.3-1. Delivered pre-built zip file, as well as ported development (configure/build/install) environment. As a side effect, also ported GNU Autoconf for VMS. GPLed software available online:
<http://www.gnuvola.org/software/emacs-for-vms/>

2001/05 – 2001/07 Inviscid Networks, Inc., San Jose, CA
Senior UNIX Systems Administrator
Interfaced w/ parent company sysads (after network split). Changed backup tapes. Wrote cron jobs. Answered UNIX questions. Implemented Unix-to-Exchange one-way mail gateway. Set up and maintained internal website. Wrote scripts for monitoring hosts on network. Moved CVS installation from NFS-based to "pserver" access method. Spec'ed, procured and brought up workstations. Installed (lots of) GNU software: i386-linux, sun4, alpha. Installed Debian GNU/Linux: i386. Installed / administered bugzilla. Installed site-wide (multi-platform) Emacs Lisp infrastructure. Negotiated and oversaw DSL installation. Documented host configuration, network architecture. Administered FlexLM licenses, license server. Used NIS for hosts, logins. Researched firewall/security tools.
Software / Process-Improvement Engineer
Documented methodology. Wrote HOWTO-style documents. Revived dormant nightly regression. Wrote / debugged scripts: sh, csh, PERL, Guile, Verilog, Emacs Lisp. Debugged / enhanced chip simulation models: C, Guile. Consulted on Guile Scheme programming. Wrote utility Scheme procedures. Mentored summer intern. Factored simulation component to standalone program. Wrote prototype

demo using Emacs front-end. Maintained moderately complex CVSROOT/modules file.

2000/09 – 2000/12 Blue Mug, Inc., Berkeley, CA

Senior Project Engineer

Collected requirements and started design and prototype for application infrastructure for embedded Linux device. Used/modified free software: Debian GNU/Linux, emacs, autoconf, gcc, guile, guile-gtk, SWIG, aewm. Wrote scripts (Bourne, Emacs Lisp) to automate various processes. Wrote HOWTO-style documents.

1999/12 – 2000/09 The Scripps Research Institute, La Jolla, CA

Research Programmer

Wrote Emacs Lisp to automate wrapping of C++ library for use by Python. Modified C++ library to remove libg++ dependency and use STL. Wrote Bourne shell, Python and Scheme to do package configuration. Used SWIG, became a co-developer. As SWIG co-developer: Cleaned up Guile support. Incorporated patches from contributors. Helped clear up licensing issue. Wrote documentation. Set up and administered CVS for multiple projects. Wrote shell scripts to install / administer / account for GNU software (used site-wide). Worked on Linux, Solaris, HP-UX, IRIX. Had root privs on Linux. Consulted for colleagues on Emacs, CVS, Linux, programming. Released all code under GNU GPL (except SWIG, which has its own license).

2000/04 Everest eCommerce, Inc., Sunnyvale, CA

Software Engineer (contract)

Enhanced Emacs-P4 Integration code. (P4 is a version control system from Perforce, Inc. The code is Emacs Lisp published as free software under the GNU GPL.) Added jobspec mining to support new command. Added hyper-linking in jobs output buffer. Submitted changes to maintainer for incorporation.

1999/03 – 1999/06 Hewlett-Packard, Inc., Seattle, WA

QA Engineer, DDS Group (contract)

Adopted and rewrote build process for Unix/NT portability (using Bourne shell scripts and GNU make). Wrote build-analysis and other maintenance scripts (Emacs Lisp). Captured specifications from developers. Developed Emacs-based automated-testing procedures. Coordinated Oracle database developers. Set up QA and Build internal mailing lists (majordomo) on a Linux host. Documented and published methodology on internal website. Evaluated CVS versus StarTeam (version control systems). Debugged Java compilation failures. Configured Oracle Application Server under NT. Did light Emacs consulting.

1998/12 – 1999/02 Cobalt Networks, Inc., Mountain View, CA

Manager, SQA/MTV Group

Managed SQA team responsible for four products. Instituted process for hiring, status, interaction (with development engineers) and document flow. Initiated discussion on quality-based release scheduling. Interfaced with product and project managers. Handled contractors.

Senior Software Engineer

Wrote scripts for product build, ChangeLog generation, and group status collection. Implemented methodology for hardware-testing. Implemented round-robin arbiter (FPGA). Acted as consultant for next-generation product architecture. Fixed some bugs in development software. Documented development processes. Cleaned up CVS tree. Used Perl, Emacs Lisp, sh, C, Verilog, Makefiles.

1998/06-19 Berkeley Networks, Inc., Fremont, CA

Verification Engineer (contract)

Provided consulting services to in-house engineer during design specification of next-generation verification environment for packet-switch testing. Implemented server side of sockets-based packet transactor protocol. Wrote example configuration script. Used Guile Scheme and GNU tools. Tested against pre-written client side. Debugged to demo quality.

1995/12 – 1998/05 ZSP Corporation, Santa Clara, CA

Leadership Positions

Cofounder. Originated certain architectural features for leading-edge DSP. Provided vision and direction for software division. Headed verification efforts. Used: C, C++, sh, PERL, Emacs Lisp, Verilog, Scheme, various asm, English.

Software Architect / Engineer

Designed and implemented a software development kit, including: assembler, linker, debugger, and two architectural simulators.

Other Things

Set up and administered heterogeneous LAN (SunOS, Linux). Moved many pieces of heavy furniture. Procured soft drinks and bagels.

1994/11 – 1994/12 Cemax, Inc., Fremont, CA

Solaris Conversion SWE (contract) for Cemax's package bundling scripts.

Converted `extract_unbundled` scripts to `pkgadd` format. Rewrote `sh` and `cs` scripts in perl. Installed `tcsh` and `perl`.

1994/08 – 1994/11 Sun Microsystems, Inc., Mountain View, CA

Bourne shell SWE (contract) for Sun's internal global (US, Europe, Japan) software distribution group.

On a team to revamp the current `softdist` system to make use of a `parameters` file instead of having separate wrappers for every executable. Also, merged in packages used by the engineering groups in Mountain View with those in use by the rest of the company.

1994/08 Silicon Graphics, Inc., Mountain View, CA

IS Support Contractor for 1st-level company-wide ISAC group.

IRIX 5.2 support/installation. SW supported: Xmosaic, Wingz, Framemaker, Indy-Magic (Unix desktop environment). General Unix help.

1994/03 – 1994/06 Technology House, Inc., San Francisco, CA

Consultant / Developer with client: Carlson Marketing Group, Carlson Companies.

Analysis, design and implementation of db client-server suggestion tracking system. Visual C++ / Windows. Co-lead duties, interacted with client users, prototyping, class / app design and implementation. Evaluation of NSDK IDE. New-hire training. Recruiting, interviewing. Fact-finding work (putting company on the Internet).

1990 – 1993 Digital Equipment Corporation, Hudson, MA

Chip Support Co-op (1993/05 – 1993/09) for Applications, Modeling and PAL-code Group

Support work for 21064 Alpha processor. Modified ISP (instruction set processor) model for RAX (random alpha exerciser). C / Ultrix / OSF/1. Developed PAL-code methodology allowing us to directly manipulate internal processor registers. Consultant areas: unix, emacs, flex and bison.

Hardware Verification Co-op (1992/01 – 1992/09) for Modeling, Tools and Verification Group

FPU-IU interface and I/O interface of an Alpha processor. Wrote macrocode and C tools to stimulate and check responses of gate- and transistor-level models of the 21066 Alpha microprocessor. Found 5% of bugs on chip. Also, responsible for procuring and then using nonlocal compute resources, and served as Ultrix consultant for group of six engineers.

Hardware Verification Co-op (1991/05 – 1991/09) for Modeling, Tools and Verification Group

Backup-cache coherency of a VAX processor. Wrote timing-dependent macrocode to ensure that the off-chip backup cache followed protocol. Also wrote ECC-verification routines.

Hardware Verification Co-op (1990/09 – 1990/12) for Modeling, Tools and Verification Group

Arithmetic functionality of a VAX vector co-processor. Developed method to verify vector inexact exception-handling. Converted existing scalar tests to vector.

Education

1993 – present	Life
1988 – 1993	Bachelors of Science, Computer Engineering Pennsylvania State University (State College, PA, USA)
1984 – 1988	Unionville High School, Valedictorian