

Resumé

Bret D. Whissel
3979 Pinta Court
Tallahassee, Florida 32303

Phone: (850) 631-1356
E-mail: bret@bretwhissel.net
<http://bretwhissel.net/>

Objective

I prefer to work in a research environment, specializing in computer programming and computer resource administration. Though I have extensive skills and experience as a system administrator, I am most engaged and productive when I am solving problems by writing and improving software.

Education

Bachelor of Arts*: Florida State University, Tallahassee, Florida. Major in Computer Science, minors in Music and Mathematics. Distinctions include the Dean's List, enrollment in the Honors program, and a Certificate of Computers in Music.

Completed coursework toward a Master's Degree in Computer Science with interests in Real Time Systems, Neural Networks, Artificial Intelligence, and Speech Recognition.

Personal Description

In short, when it comes to computer-based issues, I am a problem-solver. I am adaptable, I love to learn, and I am tenacious, all of which make me well-suited to becoming quickly proficient in technically challenging and changing environments. I am most productive when faced with a new challenge, especially if the solution requires programming of some sort. I am a self-acknowledged computer geek/nerd/dweeb, but I hide it well by possessing a decent sense of humor and diverse interests in addition to being intelligent and personable.

Language and Operating System Proficiencies

Languages

- C/C++/CWEB
- PostScript
- Java
- SQL (database)
- FORTRAN
- 80x86 Assembly

Scripting/Build

- Perl
- Python
- C-Shell/Bourne Shell
- Scheme/Elisp
- Make

Meta Languages

- Lex/flex
- YACC/Bison

Web Technologies

- HTML/XHTML/XML
- CSS
- AJAX, JQuery, JSON
- JavaScript
- Drupal (CMS)
- PHP

E-mail Technologies

- Sendmail/Postfix
- Cyrus/Dovecot/UWash IMAP
- Procmail
- mbox/maildir formats
- SpamAssassin/DCC/Razor
- ClamA/V
- MailScanner/MailWatch
- Maia Mailguard

OpSys, Windowing, Widgets

- Linux/UNIX (SunOS/Solaris)
- X Windows/Gnome/GTK
- Windows (Server and Desktop)
- Mac OSX
- Android

Text Processing, Applications

- T_EX/L^AT_EX
- Docbook
- SGML
- lilypond
- Excel
- PostgreSQL/MySQL
- The GIMP/Photoshop
- Inkscape/Adobe Illustrator

* The FSU Computer Science Department now offers a Bachelor of Arts degree with a reduced math emphasis. In contrast, my B.A. is the equivalent of the Bachelor of Science with additional courses in humanities and languages.

Professional Experience

Department of Computer Science, Florida State University, Tallahassee, Florida

Position: Manager of System Administration (*April 2013 — Present*)

- Supervise up to 15 students and full-time staff
- Advise and oversee purchases of technology products
- Establish policy and procedures pertaining to IT operations in cooperation with faculty
- Maintain firewall, routing, and switching infrastructure (Cisco) with multiple VLANs
- Manage mail server and spam filter, installed new mail server
- Wrote parser and Java modules to optimize student work shift scheduling
- Wrote user database/application for managing card swipe locks
- Wrote application to screen-scrape student registration data to create student login accounts
- Re-wrote application for student login accounts to use new student registration information
- Wrote application to print mazes for student projects
- Led department's website re-design project (in progress)
- Manage servers providing student programming resources and departmental infrastructure
- Installed new server OSes, configured and integrated with department-wide authentication
- NFS client/server debugging and performance tuning
- Wrote scripts for user account creation, management, and upgrades
- Manage property inventory
- Upgraded student computer lab
- Active Directory management
- Secure Certificate management
- Wireless LAN management
- Campus-wide author/maintainer of L^AT_EX macros for FSU thesis/dissertation production

Meteorology Department, Florida State University, Tallahassee, Florida

Position: System Administrator (*June 2001 — April 2013*)

- Designed cloning system for rapid simultaneous workstation updates over network
- Deployed department-wide LDAP authentication mechanism
- Campus-wide author/maintainer of L^AT_EX macros for FSU thesis/dissertation production
- Project manager for computer classroom installations
- Coordinate the support and networking of over 400 machines
- Respond to the computing needs of 250 faculty, staff, and students
- Plan and deploy hardware and software upgrades and replacements
- Monitor network and machine security
- Configured e-mail server, providing secure IMAP, SMTP, and web access
- Designed and implemented two departmental websites
- Managed software licensing and compliance
- Maintained real-time meteorological data ingest and distribution
- Taught FORTRAN and computer use to Meteorology undergraduate students
- Wrote software for managing local weather-forecasting contest
- Designed hash-table data file format for simultaneous read/write access via NFS

Mesoscale Meteorology Group, Florida State University, Tallahassee, Florida

Position: Assistant in Research, (*June 1989 — June 2001*)

Programming:

- Created a language to generate flowcharts
- Algorithms to discern meteorological features for NEXRAD radars
- Programs for “gridding” NEXRAD radar data
- X window environment for the development of hurricane-related algorithms
- Database and statistics-gathering routines
- An algorithm to convert fax images to PostScript (now part of libtiff/fax2ps)
- Programs producing population density maps from census data, with tornado correlation
- A “pretty” printer/reformatter/indexer for FORTRAN language programs
- MIME-enhanced GUI e-mail reader

Writing, Presentations, and Demonstrations:

- Technical reports describing newly-developed radar algorithms
- An article for the pre-prints of an international meteorological radar conference (co-author)
- Software demonstrations for National Hurricane Center and NEXRAD Technical Advisory Committee

Up With People, Tucson, Arizona

Position: Production Assistant — Music, (*July 1988 — April 1989*)

- Planned and executed rehearsals for band, soloists, and chorus of 120 college-aged students
- Critiqued and refined over 70 performances of a 2-hour musical revue in six countries
- Maintained synthesizer equipment and sequencer programming
- Taught seminars in vocal techniques and synthesizer technology

Center for Music Research, Florida State University, Tallahassee, Florida

Position: Computer Software Specialist, (*February 1982 — July 1988, excluding IBM terms below*)

Programming:

- Graphic system for motion analysis
- Keyed data storage/retrieval system using B*-trees
- Music synthesis and a music language compiler
- Calendar management and programming aids
- Character set design and printing utilities
- Neural network simulation
- Inter-user communication facility (similar to news groups)

Teaching:

- Survey of Computers in Music: an introduction to programming in C
- Advanced C Programming for Musicians: algorithms

Writing:

- User's manuals for programming utilities
- An article on terminal emulation for the C Users' Group (now C/C++ Journal)

IBM, Boca Raton, Florida

Position: Computer Programmer (temp), (*January — June 1984 and January — May 1985*)

Programming:

- Time management/leave time scheduler
- Systems Network Architecture (SNA) implementation for Series/1 under EDL
- Test programs for a new operating system

Other:

- Published an article on melody programming in assembly language for the IBM PC
- Presentation on the time management software for department managers
- Telephone support technician for PC customers

Activities, Memberships, and Awards

Community Involvement: Composer/accompanist for a community children's chorus; Accompanist for high school musical productions; music director/actor/accompanist in community theater musical productions; substitute organist/choir director for area churches; member of Tallahassee Community Chorus; former accompanist for Tallahassee Civic Chorale; former volunteer at Leon County's Adult Education Center.

Faith Presbyterian Church: Deacon; Member of Chancel Choir, Handbell Choir, and Adult Ensemble; substitute organist and choir director. Group-study leader. Accompanist for youth and children's choirs, children's choir director, and chaperone for several youth activities. Participant in inner-city mission trips to Washington, D.C. and Atlanta. Adult Sunday School co-leader. Served on Congregational Care committee, Commitment committee, Community Outreach committee, Habitat House committee, Music committee, and Organist Search committee.

Florida State University Chamber Choir

Montreat Worship & Music Conference Faculty 2005, 2006

Montreat Worship & Music Conference Planning Committee 2016

YIIE — Computer Science Honor Society

Up With People International Alumni Association, Board of Governors (1997–1999)

Electronic Frontier Foundation (EFF)

American Guild of Organists (inactive)

Association for Computing Machinery (ACM) (inactive)

Institute of Electrical and Electronic Engineers (IEEE) (inactive)

FSU 20-Year Service Commendation (2010)

Everyday Hero Award, Up With People International Alumni Association (2003)

Guardian Ad Litem Exemplary Service Award (1993)