

ATANAS DIMITROV

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Objective

Highly motivated job candidate with strong background in Computer Science, seeking professional level employment as a software developer in the area of operating systems design, systems administration, networking, or web development, utilizing his ability to work as a team member; toward a long-term goal as a programmer or web developer.

Education

o University of Georgia

Athens, GA

Degree: Masters of Science in Computer Science (currently attending)

GPA: 3.67

***Key Courses:** Computer Networks(advanced topics), Compilers, Algorithms (analytical approach to software architecture and design - advanced topics), Computer Architecture (advanced topics), Systems and Network Security (advanced topics), Image Processing.

o Georgia College & State University

Milledgeville, GA

Degree: Bachelor of Science in Computer Science

GPA: 3.2

Graduated: December 2003

***Key Courses:** UNIX (Shell Scripting in ksh, sh, bash), UNIX/Windows Systems Administration, Cisco Networking and Telecommunications (CCNA 1 and 2), System and Network Programming (C), Analysis of Algorithms (analytical approach to software architecture and design), Computer Hardware Architecture and Design, Operating Systems, Assembly Language and Digital Logic, JAVA Programming, Programming in C++, Data Structures (C++/C), Database Systems (Access, MySQL, PostgreSQL, Oracle), Object Oriented Programming (C++).

Technology Skills

Operating Systems: Solaris 7 through 9 (sparc and x86), Red Hat Linux 5 through 9 (x86), SuSE Linux 7.0/9.1/9.2 (sparc/x86), OpenBSD 3.6, Mandrake Linux 8.0(x86), Mac OS X (Darwin 7.2.0 ppc), Windows 3.1, 95, 98, 2000, NT, XP.

Programming Languages & Related Software/Standards: C, C++, x86/sparc assembly, Java, Perl, make, autoconf, libtool, ld, CVS, gdb, adb, gcc, cc, g++, Executable and Linkable Format, mach-o Runtime Architecture, Flex, Lex, Bison, Yacc, Tcl.

UNIX/Linux/Windows Shell Scripting & Shells: Korn (ksh), Bourne (sh), Bourne Again (bash), C (csh), Enhanced C (tsh), Z (zsh), DOS Shells (cmd, command).

Server Software: Apache, Sendmail, OpenSSH, SAMBA, NFS, LPRng, CUPS, ipchains, etc.

Web Development: HTML, SSI, XML, CSS, PHP, CGI, Java Script, Java Applets, SQL, Flash, Adobe Photoshop, Gimp.

***Languages:** Bulgarian (native language), Excellent English both spoken & written, proficient Russian, some German and French.

Career Experience

o Department of Computer Science/UGA Athens, GA
Teacher's Assistant (Part-Time) January 2005 - Present

Currently, I teach Introduction to Computers laboratory classes and I grade homeworks for undergraduate Computer Networks class.

o Administrative Information Systems - EITS/UGA Athens, GA
Student Worker (Part-Time) August 2004 - January 2005

Performed software upgrades and installation, updating the departmental web-page with current information.

o Sodexho Campus Dining Services/GC&SU Milledgeville, GA
Webmaster (part time) March 2000-August 2004

*Maintaining and developing the Web Sites for four major Sodexho Campus Dining branches: Georgia College & State University (<http://www.gcsudining.com/>), Augusta State University (<http://www.aug.edu/foodservices/>), Middle Georgia College (<http://web2.mgc.edu/dining/>), and Gordon College (<http://cafeteria.gdn.edu/>), using HTML, PHP, Flash, and Gimp. Sites focus on providing residential dining options information, weekly menus, events, and promotions specific to each dining location. Responsible for: updating the weekly menu items, creating advertisements upon request. Wrote perl and PHP scripts to handle feedback oriented cgi procedures.

o Georgia College & State University CSCI Department Milledgeville, GA
System Administrator (Student Participant) August 2001-December 2003

*Team leader of the UNIX system administrators group. Responsible for the maintenance of: Sun Enterprise-2500, Sun Blade-1000, Sun Ultra-60, Sun Sparcstation-20, and other departmental UNIX and Linux servers. Shell scripting using ksh, sh, and bash. The scripts were aimed at automating procedures at the administrative and user levels (user account management, centralized authentication management over ssh, automated tape and network backup procedures, Xwindows environment configuration start-up scripts, daemon initialization and shutdown scripts, mailing lists and alias management procedures, interactive boot time error detection scripts, interface initialization scripts, logfile processing scripts, scheduled system maintenance procedures, etc.) Under Solaris and Red Hat: compiled and configured Apache with PHP module support, compiled and configured Sendmail, configured printing, network troubleshooting, OS installation, NFS, SAMBA, Open-SSH, DNS. Responsible for user accounts maintenance and the main CSCI Department server administration.

o Georgia College & State University Library Milledgeville, GA
Assistant Systems Librarian (Part-time) August 2000-January 2002

*Part of a team of two student employees. Responsibilities included the maintenance of Linux and Windows workstations located within the GCSU Library building and HTML editing. Performed network troubleshooting and configuration of workstations and printers located on the local subnet. Installed and configured load balancing printing queue, using LPRng, to serve the needs of multi-user computer environment. Wrote shell scripts in order to facilitate some administrative tasks and software/OS updates/installation.

Career Related Projects

** Viewcore - software originally written for Linux, which displays ELF core dump files' content in readable form (software crash analysis). It is similar to 'readelf', found on most Unix/Linux systems, although it is more detailed and dedicated. The program is devoted to developers and is released under GPL. Recently viewcore has been ported to Mac OS X and supports the mach-o runtime architecture.

** Wrote OS and network software in C and C++ on UNIX platforms such as: loadable kernel modules, binary ELF patches, system and development tools, networked applications, and servers. In addition to the standard compilers and debuggers commonly found under UNIX, the development and implementation process involved the use of make, GNU make (gmake), automake, makedepend, mkmf, autoconf, autoheader, autoscan, libtool, ld, and CVS.

** Racial InterLan Under Linux HOWTO - document which describes the configuration of Racial InterLan networking cards under Linux. The HOWTO goes over in details from jumper settings to automated kernel module initialization.

** Detected SSH Restricted Shell Escaping Command Execution Vulnerability (demonstrated using ksh and bash and their restricted versions), which affected almost all known versions of Linux and UNIX running OpenSSH up to 3.1p1. The bug was published by securityfocus.com.

** Wrote image processing software in Java to perform operations such as smoothing, blurring, grayscale-to-binary conversion, component labeling, stereo correlation, steganography and other operations. The software uses grayscale Sun Raster format.

** Presentations:

- "Developing Linux shell code on x86 platforms"
- "Obfuscating and de-obfuscating x86 binaries under Linux"
- "Denial of service attacks over the network - DoS and DDoS"
- "Creating RPM files under Red Hat Linux"
- "Fractals and their applications in image processing"

** Developed loadable kernel modules to replace native system calls under Linux.

** Developed network simulation scripts using Tcl for Network Simulator 2.

** Developed various web sites including my own.

** Wrote a scanner for Micro-C (subset of C) using flex and lex.

** Wrote a parser for Micro-C (subset of C) using bison and yacc.

Memberships, Activities & Awards

*Member of Central State Linux Users Group (CSLUG).

*Member of the Mathematics Honors Society.

*Member of International Student Club.

*First Place Award - GC&SU Computer Programming Contest.

*Systems Administrator for Southern Programming Competition.

*Science Judge for the Regional Science & Engineering Fair.

References

Furnished upon request.