LIBRARY COMPUTER SYSTEMS TECHNICIAN

DEFINITION

Under the supervision of the director of the Library/Learning Resources Center, performs UNIX system administration, design and modification, database administration, programming and hardware and software selection and modification of application interfaces for the Library/Learning Resources Center automated services environment.

CLASS CHARACTERISTICS

This single position class is an experienced systems analyst position providing data base administration, programming and hardware and software selection and modification of user interfaces. Performs systems administrative tasks associated with the provision of a wide range of information based automation services to the campus.

EXAMPLES OF DUTIES (Illustrative Only)

Manage all aspects of the library’s computer system.

For the server environment:

- Manage systems and user processes
- Analyze server log files; setup, maintain and troubleshoot terminal port configuration files
- Analyze server performance and stability
- Analyze local and Internet-wide TCP/IP connection interfaces
- Provide analysis of statistics and errors on UNIX servers
- Manage system security at both local and Internet-user levels
- Install, maintain and troubleshoot UNIX system hardware and backup systems
- Perform UNIX shell programming and process setup and maintenance
- Troubleshoot connectivity of web services
- Analyze and author HTML documents as needed
- Maintain and troubleshoot CD-ROM server software and peripherals.

In the Library/Learning Center:

- Coordinate all library automation activities with upgrades and changes to the campus server and network environment systems while keeping abreast of changes in technology
- Perform shell, scripting and batch file programming and analysis for library application interfaces including CGI application creation using PER
- Create, maintain and troubleshoot the Web-based interface for delivery of selected library applications and library E-mail services
- Perform desktop, student application, and Internet software analysis for introduction of new library application packages
- Specify desktop and server software and hardware upgrades
- Analyze operating systems upgrades for immediate and future use
- Examine and analyze web server hardware and software upgrades for applicability for Cabrillo's library environment
- Install and troubleshoot library and general application desktop software
• Troubleshoot hardware to software data interfaces for both Windows and Macintosh workstations
• Perform network driver installation, analysis and troubleshooting for library connectivity
• Train staff in Internet fundamentals and in world-wide networking, including Internet software and application usage
• Train staff in the use of desktop and patron-use software and interfaces, including operating
• Train staff in the use and preparation of HTML encoded documents
• Maintain an awareness of current products and changes in library practice with regard to automation issues by such activities as monitoring list serves, e.g., CDROMLAN, NETTRAIN, WEB4LIB.
• Perform other duties as required/assigned

QUALIFICATIONS

Knowledge of:

• UNIX operating system fundamentals, including daemon and user process management, TCP/IP administration and security, systems log file analysis, and Internet applications in the UNIX environment
• TCP/IP connectivity on multiple desktop platforms, as well as the interfacing with Netware IPX at the workstation level
• Windows, Macintosh, and DOS operating systems
• Workstation, server, and peripheral hardware on multiple platforms
• Basic Netware, including user rights and group administration utilities
• CD-ROM inter-network connectivity and interfaces
• World Wide Web server platforms and server software
• Basic Ethernet network interfacing at the desktop level

Skill in:

• UNIX and TCP/IP system-level administration
• Installation, maintenance, and troubleshooting of server and desktop hardware and software
• The use and interfacing of TCP/IP applications, maintenance of TCP/IP connectivity
• Lab-level server and network administration
• Basic troubleshooting of Ethernet cabling at the workstation level
• UNIX system administration at the TCP/IP administration and application levels
• Installation and customization of software applications for library program needs; keep abreast of changes in technology
• Installing, setting up and customizing Internet workstations on multiple platforms
• Configuring and troubleshooting UNIX workstations and terminals
• Installation, repair, and troubleshooting for workstation and server hardware and software
• Performance of data backups, restorations and recoveries
• Provision of analysis and utilization recommendations of desktop, student application
• Internet software and E-mail services for library program delivery
• Make mathematic calculations accurately and rapidly
• Provide connectivity for local area and wide area network applications.
Other Requirements:

Must be able to safely lift and move boxes and equipment weighing up to 40 pounds.
Must be willing to work off-hour shifts, including evenings and weekends, as required.

Education and Experience:

Two years of college level coursework and two years of experience working with the operating systems and hardware configurations outlined above, preferably in a library environment; OR equivalent to graduation from a four-year college or university with major coursework in computer science, mathematics, computer engineering or a closely related field AND one year of experience working with the operating systems and hardware configurations outlined above.

Established: November, 1996
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