

Systems Programmer

Internet Technologies

PURPOSE: The Systems Programmer is responsible for designing, implementing, and supporting critical Internet services for the Milwaukee Public School System for the purpose of increasing district efficiency. The incumbent will be expected to install and support Internet services including, but not limited to, institutional email, web services, scheduling, authentication and LDAP directory services.

ESSENTIAL FUNCTIONS: The Systems Programmer will be responsible for the following:

Systems Engineering & Administration

- ◆ Provide systems engineering and administrative support for the enterprise systems and services.
- ◆ Resolve a variety of enterprise system problems of moderate to difficult scope.
- ◆ Initiate and coordinate the escalation of computer system/application problems to support staff, other staff in the District, or third-party vendors.
- ◆ Perform both routine and non-routine system administrative tasks for daily operations of complex systems.
- ◆ Perform the collection, analysis, and reporting of operation data for use in maintenance, performance tuning, and capacity planning for future enterprise system enhancements and upgrades.
- ◆ Independently determine approaches and strategies to all tasks listed above.

Emerging Technologies Research & Development

- ◆ Serve as a technical resource in the investigation of emerging technologies that are considered by the District and provide direction to management on the feasibility and reality of the technology being considered.
- ◆ Effectively develop, design, implement, and integrate new technologies with minimal supervision.
- ◆ Coordinate with different functional areas if required.

Security Engineering and Administration

- ◆ Provide security engineering and administrative support for enterprise security technologies and services.
- ◆ Identify security technologies in the effort of minimizing security risks to the organization.
- ◆ Develop, design and implement new security technologies with minimal supervision.

Project Planning and Implementation

- ◆ Plan, analyze, design, and implement enterprise services.
- ◆ Recommend and provide justification for modifications to complex systems including upgrades, additions or deletions.
- ◆ Provide leadership and technical direction through all planning and implementation processes.

Professional Development

- ◆ Active participation in the UNIX communities through mailing lists and forum discussions to remain current with any new developments in this technology.

MINIMUM REQUIREMENTS:

1. Bachelor's Degree in Computer Science, Information Technology or other related field from a college or university accredited by an agency recognized by the Council for Higher Education Accreditation, U.S. Department of Education or a foreign equivalent.
2. Three (3) years of software and security engineering experience performing duties related to this position including UNIX administrative experience.
3. Residence in the City of Milwaukee within six (6) months of appointment and throughout employment.

Note: Equivalent combinations of education and experience may also be considered

PREFERRED QUALIFICATIONS:

- ◆ Knowledge of standards-based network resource technologies (i.e., RADIUS, TACACS, DNS, DHCP).
- ◆ Knowledge of BSD (e.g., Free BSD, OpenBSD), Linux and Mac OS X operating systems.
- ◆ Knowledge of SQL database servers and secure web servers such as Apache with mod_ssl.
- ◆ Ability to write technical specifications, and operational/end-user documentation.

KNOWLEDGE, SKILLS, & ABILITIES:

- ◆ Knowledge of UNIX (Sun/Solaris required), Perl, C or C++ programming, Java, and Shell Script.
- ◆ Knowledge of standards-based (TCP/IP) applications including, but not limited to, account management, directory and authentication services, SMTP, POP, HTTP, IMAP.
- ◆ Ability to develop functional understanding of security technologies and concepts including, but not limited to, encryption/cryptography (openSSL, secure shell, IPsec), intrusion detection systems (host and network based), firewall technology, secure protocols, and secure programming.
- ◆ Skill in preparing and presenting information to staff & management.
- ◆ Knowledge of software development tools, application development methodologies, and project management strategies.
- ◆ Knowledge of enterprise level directory services (LDAP) deployment and support.
- ◆ Ability to provide end-user and operational technical support within a Sun/Solaris and Linux production environment.
- ◆ Ability to work productively in teams.
- ◆ Ability to manage multiple projects.
- ◆ Ability to expediently learn emerging technologies with minimal supervision and support.
- ◆ Ability to communicate professionally with a diverse group of clients and staff.

THE CURRENT SALARY RANGE IS: \$56,667-\$67,007 annually with excellent benefits. Recruitment is normally at the beginning of the pay range.

#05-106—JRS (SM)

8/4/05