



Senior Internet Engineer (Los Nettos) (ITS)

Job Description

JOB INFORMATION

| | |
|-------------------|---|
| Job Code: | 165602 |
| Job Title: | Senior Internet Engineer (Los Nettos) (ITS) |
| FLSA Status: | Exempt |
| Supervisory: | |
| Job Family: | Network Administration |
| Job Family Group: | Information Technology |
| Management Level: | 7 Individual Contributor |

JOB SUMMARY

Drives the day-to-day technical operations of the Los Nettos regional network. Designs, configures, troubleshoots and maintains regional network equipment across multiple platforms. Ensures all networking activities are aligned with industry best practices and ITS/university policies and procedures. Collaborates with multi-organizational network engineers, ensuring the delivery of network services to Los Angeles-area educational and research organizations. Demonstrates ITS values in action.

JOB QUALIFICATIONS:

Education

| Req | Pref | Degree | Field of Study |
|-----|------|-------------------|----------------|
| X | | Bachelor's degree | |
| | X | Master's degree | |

Additional Education

Check here if experience may substitute for some of the above education.

Combined experience/education as substitute for minimum education

Work Experience

| Req | Pref | Work Experience | Experience Level |
|-----|------|-----------------|------------------|
| X | | 5 years | |
| | X | 8 years | |

Additional Work Experience

Check here if education may substitute for some of the above work experience.

Combined experience/education as substitute for minimum work experience

Knowledge, Skills and Abilities

| Req | Pref | Functional Skills |
|-----|------|--|
| X | | Demonstrated experience with L3 protocols (e.g., BGP, OSPF, VRF), L2 protocols (e.g., STP, LACP), and the TCP/IP protocol suite. |
| X | | Expert knowledge of optical networking, including use of multidegree DWDM systems. |

Knowledge, Skills and Abilities

| Req | Pref | Functional Skills |
|-----|------|--|
| X | | Practical experience with copper and fiber- optic cables and transceivers. |
| X | | Firm understanding of and experience with security best practices (e.g., VPN, firewall, encryption), Linux server management, and allied software and applications. |
| X | | Demonstrated experience with Cisco, Arista and Ciena switches, routers, optical platforms, and DNS (BIND), MySQL, Apache, Perl, Python, and C. |
| X | | Understanding of data center operations, peering policies and internet exchange best practices. |
| X | | Experience providing and using colocation services. |
| X | | Ability to develop positive working relationships and strong rapport with team members. |
| X | | Solid collaboration, communication, and project management skills, with proven experience delivering reliable and quality network service within a higher education and/or service provider environment. |
| | X | Experience in IT, network engineering, data center networking, and with internet peering exchanges. |

Certifications

| Req | Pref | Select Certifications | Enter Additional Certifications |
|-----|------|--|---------------------------------|
| | | Cisco Certified Internetwork Expert (CCIE) | |

Other Job Factors

JOB ACCOUNTABILITIES

| | % Time | Essential | Marginal | N/A |
|---|--------|-----------|----------|-----|
| Drives the development and maintenance of the technical environment, creating custom scripts to improve network efficiency and enhance network automation. Delivers reliable, quality network service to associates and member institutions, crafting thorough project plans, driving progress, and defining and developing procedures for network administration, operations, and disaster recovery. Provides network expertise, monitoring and producing regular performance status reports, and proactively and reactively resolving network issues and identifying root causes. | | | | |
| Contributes to group administration, creating and maintaining documentation for the Los Nettos board of directors, technical committee, and associates. Participates in website development, supports DNS, hostmaster and network operations functions, and contributes to the information repository. Works with industry experts and vendors to identify and implement effective applications of technology, openly sharing experience and subject matter expertise with relevant stakeholders. | | | | |
| Manages complex inter-jurisdictional projects for the Los Nettos regional network, and designs new network architecture to meet its needs. Provides advanced consultative services and develops effective solutions to complex problems, working collaboratively to build responsive, professional relationships with leaders and stakeholders to achieve shared objectives. | | | | |
| Actively embodies ITS values and behaviors (e.g., accountability, customer service), and contributes to a culture of trust and transparency by sharing information broadly, openly, and deliberately. Supports the vision for Los Nettos, working closely with team members and management to implement and support effective solutions for the network. Maintains currency with technology, standards, and best practices to support process improvement efforts within the team and across ITS. | | | | |

Other Requirements

| Essential: | Emergency Response/Recovery | Essential: | Mandated Reporter |
|------------|--|------------|---|
| | In the event of an emergency, the employee holding this position is required to "report to duty" in accordance with the university's Emergency Operations Plan and/or the employee's department's emergency response | | A mandated reporter who in his or her professional capacity has knowledge of, or reasonably suspects a person who is under the age of 18 years, elderly, or a dependent adult has been the victim of abuse or neglect must report the suspected incident. |

Other Requirements

| | | | |
|--|---|-------------------|---|
| <i>Essential:</i> | <i>Emergency Response/Recovery</i> | <i>Essential:</i> | <i>Mandated Reporter</i> |
| | and/or recovery plans. Familiarity with those plans and regular training to implement those plans is required. During or immediately following an emergency, the employee will be notified to assist in the emergency response efforts, and mobilize other staff members if needed. | | The reporter must contact a designated agency immediately or as soon as practically possible by telephone or in writing within 36 hours. By virtue of the associated job duties, this position qualifies as a mandated reporter as required by state law and USC’s policy at: https://policy.usc.edu/mandated-reporters/ |
| <i>Campus Security Authority (CSA)</i> | | | <i>Essential:</i> |
| By virtue of the associated job duties, this position qualifies as a Campus Security Authority as required by law and USC’s policy at: https://dps.usc.edu/alerts/clery/ | | | No |

ACKNOWLEDGMENTS

The above statements reflect the essential and non-essential functions as necessary to describe the principle contents of the job. They are not intended to be a complete statement of all work requirements or duties that may be required of the position. I understand that I may be asked to perform other duties as assigned. USC reserves the right to add or change duties at any time.

The University of Southern California is an Equal Opportunity Employer. USC prohibits discrimination on any basis protected under federal, state, or local law, regulation, or ordinance or university policies. All employment decisions are based on individual qualifications and business need.

I acknowledge receipt of this job description and its associated physical requirements. I have read and understand the job description and job requirements and agree to abide by their contents. I realize that duties may be requested of me that are not specifically stated herein. I understand that I will be expected to adjust to potential fluctuations in work volume. I understand that, if I have any questions about the essential functions or expectations of my position, my supervisor and/or HR partner are available to discuss them with me.

Print Employee Name

Signature

Date

Print Manager Name

Signature

Date

This job description describes the general nature and level of work required by the position. It is not intended to be an all-inclusive list of qualifications, skills, duties, responsibilities or working conditions of the job. The job description is subject to change with or without notice, and Management reserves the right to add, modify or remove any qualification or duty. Nothing in this job description changes the existing at-will employment relationship between the university and the employee occupying the position.