



USC University of
Southern California

Senior Internet Engineer

Job Description

JOB INFORMATION

<i>Job Code:</i>	165598
<i>Job Title:</i>	Senior Internet Engineer
<i>FLSA Status:</i>	Exempt
<i>Supervisory:</i>	Leads one or more employees performing similar work.
<i>Job Family:</i>	Network Engineering
<i>Job Family Group:</i>	Information Technology
<i>Management Level:</i>	7 Individual Contributor

JOB SUMMARY

Oversees, manages, coordinates and participates in developing complex inter-campus, inter-jurisdictional projects with mission-critical implications for the Los Nettos regional network, colocation services, and other projects associated with customers external to the university. Serves as a project leader/technical expert providing project services utilizing a high level of leading edge developmental or prototypical technologies, which requires creative problem solving and technical expertise, cutting across processes, applications, disciplines and technologies. Provides technical and training assistance to less experienced internet engineers, as assigned.

JOB QUALIFICATIONS:

Education

<i>Req</i>	<i>Pref</i>	<i>Degree</i>	<i>Field of Study</i>	
X		Bachelor's degree		
	X	Bachelor's degree		In
	X		Computer Science	Or
	X		in related field(s)	

Additional Education

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

Combined experience/education as substitute for minimum education

Work Experience

<i>Req</i>	<i>Pref</i>	<i>Work Experience</i>	<i>Experience Level</i>	
X		5 years		
	X	7 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		Strong technical knowledge and experience with Optical networking, LAN and WAN switching, IP routing, Linux server management and administration.
X		Knowledge of data network and telecommunications protocols including but not limited to STP, OSPF, MPLS, BGP, IPv6, SIP, multicast, DNS and DHCP.
X		Progressively responsible experience in related field.
X		Demonstrated strong written and oral communication skills with ability to work effectively with internal and external organizations.
X		Strong analytical abilities and reasoning to resolve uncommon problems.
	X	Ability to write, modify, maintain, and document software tools in a high-level language.

Certifications

Req	Pref	Select Certifications	Enter Additional Certifications
			Network Engineering with certifications such as Cisco CCNP, Redhat RHCE.

Other Job Factors

- May provide 24/7 on-call support as needed.

JOB ACCOUNTABILITIES

	% Time	Essential	Marginal	N/A
Oversees, manages, coordinates and participates in developing complex inter-campus, inter-jurisdictional technical projects for the Los Nettos regional network, including colocation services, and other projects associated with customers external to the university.				
Manages highly complex projects that have high visibility and impact on Los Nettos member institutions and customers. Serves as a project leader/technical expert leading the deployment of cutting edge internet technologies, and utilizing creative problem solving methodologies and high-level technical expertise.				
Has responsibility for the design, implementation and troubleshooting of highly complex DWDM, switched, and IP network infrastructure spanning multiple Los Nettos member institutions, customers, IP backbone providers, and IP peering exchanges.				
Formulates and defines project scope and objectives. Determines need to change project scope and schedules. Manages project scope to ensure that changes are formalized through a documented change process.				
Establishes project plans, schedules and priorities. Identifies resource requirements. Manages delivery of complex deliverables by driving projects through various stages, including project initiation, planning, execution and closure. Provides status reports of project progress for management and stakeholders, as required.				
Collaborates with and provides advanced consultative services to constituents. Works closely with industry experts and vendors to provide advanced networking services, effective application of technology, and resolve complex problems.				
Coordinates project teams and identifies stakeholders. Communicates regularly and effectively with stakeholders, technical staff, senior management and customers regarding project goals, objectives, deliverables, plans and status throughout the project.				
Leads the evaluation of hardware and software products for compatibility, applicability, and feasibility for current use and future growth. Performs meticulous test plans and prototypes in the lab for peer review.				
Has responsibility for specifying, installing, and maintaining servers to provide various services, including but not limited to domain name system (DNS), Web, database, and network monitoring and graphing.				
Monitors and analyzes network performance, implements performance tuning measures, and troubleshoots highly complex and unique network problems. Develops custom tools using software, as needed.				

JOB ACCOUNTABILITIES

	<i>% Time</i>	<i>Essential</i>	<i>Marginal</i>	<i>N/A</i>
Ensures and provides engineering and network connectivity support to external projects and customers.				
Provides leadership guidance and direction to others, as needed. Reviews the work of others, as needed or requested. Provides technical and training assistance to less experienced internet engineers, as assigned. Mentors/trains peer engineers from Los Nettos community.				
Oversees network documentation and maintenance of equipment. Develops network and server security best practices. Devises or modifies procedures to solve complex problems.				
Stays informed of new developments, technologies and trends by reading journals and other pertinent publications, maintaining contact with vendors, and participating in professional organizations, meetings, and seminars.				

Other Requirements

<i>Essential:</i>	<i>Emergency Response/Recovery</i>	<i>Essential:</i>	<i>Mandated Reporter</i>
	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 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.		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. 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.