



USC University of
Southern California

Senior Systems Engineer Job Description

JOB INFORMATION

Job Code:	166944
Job Title:	Senior Systems Engineer
FLSA Status:	Exempt
Supervisory:	
Job Family:	Network Operations
Job Family Group:	Information Technology
Management Level:	7 Individual Contributor

JOB SUMMARY

Supports the design, implementation, configuration and day-to-day operations of the university's server environment. Collaborates with a broad range of customers, partners, and key stakeholders in administrative and academic units. Provides best-in-class systems engineering services, ensuring the stability and security of centralized, distributed, physical, and virtual servers.

JOB QUALIFICATIONS:

Education

Req	Pref	Degree	Field of Study	
X		Bachelor's degree		
	X	Bachelor's degree	Computer Science	Or
	X	Bachelor's degree	Computer Information Systems	Or
	X	Bachelor's degree	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

Req	Pref	Work Experience	Experience Level	
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		Extensive and leading-edge knowledge of design, deployment, and support of advanced virtualized infrastructures and multiple Operating Systems.

Knowledge, Skills and Abilities

Req	Pref	Functional Skills
X		Expert knowledge of emerging server, cloud and data center technologies and architectures.
X		Proven experience with scalable management automation and orchestration methodologies and tools for cloud platforms.
X		In-depth knowledge of networking, routing, firewalls, subnets, subdomains, VLANs, and VxLANs.
X		Proven experience with network security and troubleshooting network issues on operating systems.
X		Expert ability to develop, design, test, and document improvement solutions and processes (such as scripting, automation, and workflow) aimed to improve system's efficiency, reliability, scalability, and cost effectiveness.
X		Demonstrated experience with monitoring and proactively managing systems to assure their performance, availability, security, and capacity.
X		Demonstrated proficiency using scripting or other programming languages to automate processes and maintain the systems environments.
X		Ability to interpret, analyze, and apply pertinent service level agreements, policies, procedures, regulations, and other requirements, and turn them into actionable outcomes.
X		Experience architecting, implementing and supporting on-premise workloads and IaaS cloud platforms.
X		Excellent organizational skills, able to set priorities and manage multiple projects.
X		Ability to provide documentation on configuration standards, troubleshooting steps, and infrastructure design.
X		Exemplary communication skills, able to develop positive working relationships and strong rapport with team members, and interact with a diverse community of colleagues and stakeholders.
	X	Bachelor's degree in computer science, computer information systems, information technology, or relevant field.
	X	Experience in IT, higher education, or other relevant fields.

Other Job Factors

JOB ACCOUNTABILITIES

	% Time	Essential	Marginal	N/A
Collaborates with key stakeholders across the organization, including partners, communicating effectively to deliver high-quality system engineering services and solutions. Drives system planning, design, configuration, implementation, updates, and maintenance. Follows policies and procedures consistent with university practices. Ensures day-to-day system operations are consistent, reliable, and accessible to campus users.				
Manages troubleshooting support activities for issues escalated by the customer experience team, and communicates clearly with relevant stakeholders, appropriately. Develops and maintains knowledge-base articles, tutorials, and training resources.				
Maintains currency with new and emerging technologies, leveraging the latest industry knowledge to facilitate opportunities for innovation and continuous improvement. Proactively experiments with new ideas and approaches, and identifies and leads process improvements for the team. Identifies and recommends ways to improve existing procedures, and shares details with stakeholders.				
Manages the design, configuration and maintenance of server platforms to support operational efficiencies. Monitors statistical analyses of performance, informing tuning, automation, and optimization activities. Utilizes best practices for effective troubleshooting and problem-solving. Analyzes highly complex datasets to identify root causes, and makes sound decisions that benefit the organization and university.				
Collaborates with team members and management, implementing effective solutions to support the team's vision. Maintains currency with technology, standards, and best practices. Supports process improvement efforts within the team and across the organization.				
Aids the cultivation of an inclusive environment and a culture of trust and transparency, sharing information broadly, openly, and deliberately. Builds and maintains collaborative relationships with diverse groups of peers, team members, and leadership. Promotes an environment that fosters inclusive relationships and creates unbiased opportunities for contributions through ideas, words, and actions that uphold principles of the USC Code of Ethics.				

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.