

University of Virginia

Job Summary

Job Code:	Job Title:	Computer Engineer II
UVA Survey Code:	UVA Survey Code Title:	
Pay Band:	Career Path:	Systems & Network Administration
FLSA Status:	Management or Individual Contributor:	Individual Contributor

Position Summary: Describe below the primary purpose and function of this job.

Administer all aspects of a distributed computer system supporting a specified functional area of university operations. Plan and coordinate system utilization, system upgrades, system security, and perform growth analysis and capacity planning. Develop scripts to automate and manage system processes and performance. Investigate and solve system administration and client/server or application performance problems. Perform application installation, maintenance, training, and user support, as required.

Key Roles & Responsibilities: List up to 6 key roles and responsibilities of this job.

1. Administer and support university systems to include secure access, data safety and integrity, disaster recovery, and physical security.
2. Maintain networked servers, workstations, peripherals and terminals, ensuring proper integration of these components with existing university computer systems. Plan and implement system security policy, to include firewalls, host and client access, file permissions, and user accounts. Troubleshoot networks, systems, and applications to identify and correct malfunctions and other operational problems. Monitor file and system access to ensure confidentiality and proper use. Maintain file services and backup/recovery processes and procedures.
3. Design and develop methods and procedures for collecting, organizing, interpreting, and classifying system and log data for security, performance and capacity planning needs. This should include application logs such as web and database services hosted by the system.
4. Design and program specific system scripts in response to department/client needs; install and debug new and/or upgraded software on server and client platforms, ensuring compliance with current site licenses; document all administered systems; manage websites and associated pages.
5. Research, evaluate, install, configure, and troubleshoot all hardware, peripherals, and equipment necessary to meet integrated systems objectives. Develop specialized skills within specific components of system administration.
6. Develop and implement various training and instruction programs for users on the use of operating systems, networking, applications, and databases.

Expertise: Describe the requirement for knowledge and expertise about the subject area as well as how various parts of the University work together to achieve objectives. Explain the degree of understanding required of the industry and university environment.

Incumbent is required to have a working knowledge of his/her discipline including all required certifications as well as an understanding of the business environment of a large university system. Incumbent must demonstrate a basic understanding of the University system, its policies, and its operating procedures. Incumbent is expected to maintain currency of knowledge with respect to relevant state-of-the-art technology, equipment, and/or systems.

Incumbent should understand data security and disaster recovery systems and procedures; system administration, applications, network protocols and services; a broad range of relevant client operating systems, applications, and equipment; understanding of LAN administration in a secure environment; systems growth analysis and capacity planning processes and techniques; data management techniques; a system scripting language and how to develop system utilities; computer site licensure regulations and requirements; and customer service standards and procedures. Incumbents must have ability to identify problems and coordinate hardware and/or software recovery, installations and upgrades; implement and troubleshoot system performance, changes and modifications; write complex technical instructions in the use of the supported systems and applications; communicate with and interpret the operational requirements of end-users; investigate and analyze information and draw conclusions; and process computer data and format and generate reports.

Problem Solving: Describe the nature and complexity of the problems this position encounters on a recurring basis. Include information regarding the level of innovation required, if any, and include mention of environmental factors that may add to the complexity of resolving issues.

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Incumbent will address moderately complex problems and will use experience and judgment in selecting among authorized procedures. Incumbent seeks assistance when guidelines are inadequate, significant deviations are proposed, or when unanticipated problems arise. Incumbent will assist more junior-level staff in solving routine problems if necessary.

Nature & Area of Impact: To what degree does this job affect the University (i.e., through interactions with faculty or students, making decisions, defining or setting strategy, etc.)? What is the breadth of the impact that this job has, either positive or negative (i.e., affects own team, department, function, business unit, entire university, etc.)?

Impact is typically limited to the team/department for which the incumbent works. Daily work quality and decision-making can affect the productivity of students, faculty and/or staff. Impact of errors can be substantial and/or university-wide.

Interactions / Interpersonal Skills: Describe the nature and level of interactions this job has with others, both internally and externally. Explain any specific interpersonal skills necessary to successfully perform this role (i.e., negotiation skills, represents business at external events or to governmental bodies, etc.).

Interactions are typically with fellow team members, but the incumbent will also have interactions with assigned student, faculty, or staff clients. Incumbent may work with external vendors or service providers. Incumbent should possess good verbal and written communication skills to convey technical guidance and information to users and to provide excellent customer service. Incumbent may train or provide guidance to more junior staff members.

Distinguishing Characteristics

This is the intermediate level for the discipline. Incumbent possesses all requirements and skills for Level 1 and has achieved proficiency in the typical tasks assigned to Level 1.

- **Skills:** Distinguished from Level 1 skills in that the Level 2 incumbent has developed his/her technical skills and begins to apply them regularly.
- **Level of Work:** Distinguished from Level 1 work by additional variation in activities and the latitude to apply skills to solve routine problems without review. Assignments at Level 2 become longer-term and the incumbent will have some latitude to devise the approach and method to performing the assignment.
- **Supervision:** Distinguished from Level 1 by the types and duration of assignments. Level 2 incumbents are expected to perform routine, daily activities without supervisory intervention. Level 2 incumbents also receive longer-term assignments for which he/she will have immediate supervision. Also distinguished from Level 1 in that the incumbents serve as a resource to Level 1 incumbents on routine problems. Level 2 incumbents will often train Level 1 incumbents on work processes and policies.
- **Interactions:** Distinguished from Level 1 in that the Level 2 incumbent will begin working beyond his/her own team. The Level 2 incumbent will work with related teams and with client groups.
- **Focus:** Level 2 focus is distinguished from Level 1 in that the Level 2 incumbent also begins to work toward specific team goals.

Job Requirements And Qualifications: Indicate the minimum and preferred education and experience for this job and any licenses and certifications required.

Minimum Education:	Bachelor's degree or equivalent experience in Computer Science, MIS, Computer Engineering or related disciplines.	Preferred Education:	Bachelor's degree in Computer Science, MIS, Computer Engineering or related discipline.
Minimum Experience:	1-3 years	Preferred Experience:	3-5 years

Required Licenses/Certifications: