

# University of Virginia

## Job Summary

<b>Job Code:</b>	<b>Job Title:</b>	Systems Engineer II
<b>UVA Survey Code:</b>	<b>UVA Survey Code Title:</b>	
<b>Pay Band:</b>	<b>Career Path:</b>	Systems Engineering, Design & Development
<b>FLSA Status:</b>	<b>Management or Individual Contributor:</b>	Individual Contributor

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

Support the stability, integrity, and efficient operation of the in-house information systems that support core university functions. This is achieved by developing, monitoring, maintaining, supporting, and optimizing software and associated hardware and operating systems. Provide functional and empirical analysis related to the design, development, and implementation of systems, including hardware, utility software, development software, and diagnostic software. Provide system integration and security plans and implementation.

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

1. Work with functional counterparts to design and develop configurations, complex workflows, and system integration procedures. Document deployed systems and their integration points. Create test plans and perform regression testing and white box testing as modules are integrated into the end systems.
2. Formulate and define specifications for operating software programming applications or modify/maintain existing applications using engineering releases and utilities from the manufacturer.
3. Participate in the initial configuration and ongoing enhancements to the operating system's application architecture; assist with application upgrades; application tuning; support for data conversion processes; development of interfaces; assistance with performance and load testing; and support of the application security environment.
4. Design, code, test, debug, and document programs. Participate in the development of test strategies, devices and systems. Design and develop software to automate, monitor, test, deploy, and support systems. Perform regular tests of the high availability, disaster recovery, security, and backup processes. Manage the staging environment used for final pre-deployment testing and verification.
5. Provide ongoing technical assistance to customers regarding applications and participate in upgrades and system enhancement projects. May assist other systems programmers to effectively utilize the systems developed.
6. Implement disaster recovery procedures, and ensure that systems meet high availability standards.

**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 have knowledge of computer and network architectures; systems analysis and software development in a client/server environment using current development tools, system administration, TCP/IP networking; relational database structured query language (SQL); object oriented design; and multiple programming languages. Incumbent should be comfortable working with various operating systems and hardware solutions, non-vendor specific and open source. Incumbent must also have the ability to determine computer problems and coordinate hardware and/or software solutions; plan, implement, test, and troubleshoot system software; install, test, and maintain operating software and hardware; document work in progress and write technical instructions; and investigate and analyze information and draw conclusions.

**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.

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.

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**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.

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

**Required Licenses/Certifications:**