University of Virginia
Job Summary

Job Code: Database Architect
Job Title: Database Architect
UVA Survey Code: Database Administration
UVA Survey Code Title: Database Administration
Pay Band: Individual Contributor
Career Path: Database Administration
FLSA Status: Individual Contributor
Management or Individual Contributor

Position Summary: Describe below the primary purpose and function of this job.
Design and construct relational databases for data warehousing, data marts and data stores. Develop data modeling and is responsible for data acquisition and access analysis and design; and archive, recovery, and load strategy design and implementation.

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

1. Direct and participate in the design, development and testing of database standards and best practices: backup/recovery, disaster recovery, database file system management, replication, clustering, installation, and configuration.
2. Define data standards and models for warehouse architectures. Evaluate and select infrastructure components such as software, hardware, database management systems and networking capabilities. Perform dimensional modeling using data modeling tools.
3. Lead and participate in database design review sessions. Work on and participate in project development throughout the entire systems development lifecycle. Manage client priorities and expectations by establishing agreed service levels.
4. Troubleshoot and provide technical solutions to database issues encountered by new and existing applications in the environment. Actively monitor the database environment to increase efficiency, improve reliability, and minimize operating expenses. Analyze and tune application performance by optimizing SQL, stored procedures and triggers. Assist with stored procedure design and package development as required by development projects.
5. Coordinate new data development ensuring consistency and integration with existing warehouse structure. Review business requests for data and data usage; research data sources for new and better data feeds. Assist in continuous improvement efforts in enhancing performance and providing increased functionality.
6. Provide technical leadership to project teams, providing design and implementation standards to team members.

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.
As the technical expert, incumbent is required to have an expert understanding of his/her discipline including all required certifications as well as an expert understanding of the business environment of a large university system. Incumbent must demonstrate an exceptional understanding of the University system, its policies, and its operating procedures. Incumbent must have excellent project management skills and the ability to work within a matrixed environment if necessary. Incumbent is expected to maintain currency of knowledge with respect to relevant state-of-the-art technology, equipment, and/or systems.
Incumbent should be an expert in supporting critical ERP systems in a university environment and have multi-platform experience. Incumbents must have ability to identify problems and coordinate hardware and/or software solutions; implement and troubleshoot programming changes and modifications; write complex technical instructions in the use of programs and/or program modifications; 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.
Incumbent will address highly complex or unprecedented problems and will use experience, judgment, and innovation in creating solutions. Incumbent seeks assistance for problems that are business-critical. Incumbent develops innovative approaches to problem-solving and anticipates/mitigates potential issues.
**University of Virginia**  
**Job Summary**

**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 felt within the team/department for which the incumbent works and within multiple, coordinating departments. Work quality, decision-making and long-term project management can affect the productivity of students, faculty and/or staff. Impact of errors is substantial, usually university-wide, and can have a lasting effect.

**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, line management and clients, requiring excellent customer service skills. Incumbent must be able to translate complex technical information to non-technical audiences. Incumbent will provide work guidance to team members and provide management with input into performance management. As a top technical expert, the incumbent will provide guidance to management on critical technology issues and serve as technical leader on cross-functional teams and on projects for external clients.

**Distinguishing Characteristics**

Interactions are with fellow team members and coordinating team members, but the incumbent will also have interactions with assigned student, faculty, or staff clients – typically at a management level. Incumbent works with and may manage external vendors and service providers. Incumbent should possess excellent verbal and written communication skills to convey technical guidance and information to users and to provide excellent customer service. Incumbent will train and provide guidance to more junior staff members and provide management with input into performance evaluations. Incumbent regularly provides guidance to management on critical technology issues. Incumbent guides technical direction and influences department/University strategies. Incumbent is recognized as an expert within and external to the University.

**Job Requirements & 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: | Master’s degree in Computer Science, MIS, Computer Engineering or related discipline. |
| Minimum Experience: | 7+ years | Preferred Experience: | 10+ years |
| Required Licenses/Certifications: | Microsoft Certified SQL Server DBA, Oracle Certified DBA |