Data Systems Analyst

higheredjobs.com/search/details.cfm

Job Requisition:
JR100870 Data Systems Analyst (Open)

Department:
CC00880 VIMS1 | Office of ITNS

Job Description Summary:
The mission of William & Mary's Batten School of Coastal & Marine Sciences & Virginia Institute of Marine Science (VIMS) is to seek and broadly communicate knowledge in marine and coastal science to the Commonwealth of Virginia, the nation, and the world through research, education, and advisory service. The Batten School & VIMS make seminal advances in understanding coastal and marine systems through research and discovery, translate research findings into practical solutions to complex issues of societal importance, and provide new generations of researchers, educators, problem solvers, and managers with an education of unsurpassed quality.

Unit Mission Statement:

To facilitate the missions of VIMS (education, research, and advisory services) and to enhance the productivity of the VIMS community (faculty, staff, and students, through information technology.

Job Description:

The Data Systems Analyst supports institutional research, operations, and data-driven initiatives through the acquisition, management, and provisioning of structured datasets. This position collaborates with end users, researchers, and technical staff to design, develop, and maintain systems that ensure reliable access to data resources. The analyst contributes to the development of data models, supports machine learning and AI-assisted research workflows, and assists in software development tasks to automate data processing and enhance system functionality. This role requires strong data handling skills, familiarity with programming and scripting languages, and the ability to work within established security, privacy, and compliance frameworks.

Core Responsibilities include (but are not limited to):

- Acquire, clean, transform, and provision datasets in accordance with end-user requirements and institutional data governance standards.
- Develop and maintain workflows and scripts to automate data ingestion, transformation, and export using tools such as Python, JSON, or SQL.
- Assist in designing and implementing data models and schemas to support analysis, reporting, and AI/ML development.
- Collaborate with researchers, data stewards, and IT staff to ensure data systems are optimized for accessibility, reproducibility, and sustainability.
- Support the development, training, and evaluation of machine learning and predictive models under the guidance of senior staff or project leads.
- Document data processes, pipelines, and system integrations for transparency, reproducibility, and operational continuity.
- Provide technical support for data access tools, APIs, and dashboards used by internal stakeholders.
- Monitor data quality, system performance, and storage utilization, escalating issues as needed to ensure operational reliability.
- Stay informed of institutional policies and legal standards relating to data privacy, research compliance, and cybersecurity.
- Participate in cross-functional teams and working groups related to data strategy, analytics, or research computing as assigned.

Required Qualifications:

The ideal candidate possesses strong problem-solving abilities to address complex database and technology issues, excellent communication skills for effective collaboration with users and stakeholders, and solid organizational capabilities to manage multiple priorities. Additionally, they bring experience with project management methodologies to support the successful implementation and oversight of technology solutions.

- Bachelor's degree in data science, computer science, information systems, statistics, or a related field, or equivalent combination of education and experience.
- Demonstrated experience working with structured data, including acquisition, cleaning, transformation, and analysis.
- Proficiency in one or more programming or scripting languages used for data processing (e.g., Python, R, SQL, JSON, PowerShell). Familiarity with relational databases and data modeling principles. Proficiency in standard database protocols (ETL, Schemas, Metadata).
- Ability to document workflows, processes, and technical specifications clearly and effectively. Strong analytical and problem-solving skills with attention to detail.
- Ability to work collaboratively in a team environment and communicate effectively with technical and non-technical stakeholders.

Preferred Qualifications:

- Experience supporting or developing AI/ML models or analytics pipelines.
- Familiarity with version control systems (e.g., Git) and software development practices. Familiarity with Java and JavaScript.
- Exposure to cloud-based data platforms, APIs, or data integration tools.
- Experience working in a research, academic, or public sector environment.
- Coursework or certification in data science, machine learning, or analytics-related topics.
- Proficiency in Microsoft 365 ecosystem tools such as SharePoint Online, OneDrive for Business, Teams, Forms, Power Automate, and scripting with PowerShell.
- Familiarity with Microsoft SQL Server components (SSMS, SSRS, SSIS).
- Experience managing users, groups and security settings in M365 environments.

Salary - Up to $80,000.00 commensurate with experience

Review date: 10-25-25

For full consideration, submit application materials by the review date, Applications received after the review date will be considered if needed."

We will not sponsor applicants for work visas for this vacancy.

Additional Job Description:

- Prioritizes and assigns work to subordinate staff.
- Plans and implements the delivery and improvement of service, staffing and resources.
- Applies comprehensive knowledge of particular function, (e.g. computer operations, production control, or network) to the oversight of significant assignments.
- Resolves conflicting demands of users.
- Evaluates the effectiveness of services provided and recommends changes in procedures to meet user's needs.

- May perform any of the following: participate in development of strategic planning activities, review and analyze data to predict future needs and recommend enhancements; prepare budgeting and cost analysis; develop technical standards and policies; plan work of others to meet project deadlines; set priorities based on user needs.

Job Profile:
JP0726 - Database Administrator - Exempt - Salary - S13

Qualifications:

Position Restrictions:
No Restriction - Continuing E&G funded position and not term-limited
EEO is the Law. Applicants can learn more about William & Mary's status as an equal opportunity employer by viewing the "Know Your Rights" poster published by the U.S. Equal Employment Opportunity Commission. https://www.eeoc.gov/know-your-rights-workplace-discrimination-illegal
© 2026 HigherEdJobs. U.S. Patent 8,548,928