

Functional Area:	Office of the Vice President for Finance: Controllership		
Job Title:	Data Analyst 3	Position Title:	Data Engineer
Reports to:	Manager of Business Intelligence Solutions	Prepared On:	September 2019
Pay Level: 8	Duration (if applicable):	Hours per week/status: 40/Exempt	

GENERAL OVERVIEW

The Office of the Vice President for Finance (VPF) works to advance MIT's mission by supporting thoughtful stewardship and effective deployment of the Institute's financial resources. Forward-thinking and future-oriented, this 165-person office is working to create a seamless administrative experience for MIT colleagues and make it easier for them to comply with grant, accounting, and other applicable rules. VPF also seeks to enhance the quality of financial information available to MIT and is focused on providing services that are readily adaptable to the evolving demands of an increasingly global Institute. A team-oriented office, VPF strives to exemplify financial and administrative excellence and the highest levels of integrity, inclusiveness, and accountability.

POSITION OVERVIEW STATEMENT

The Data Engineer participates in the full life cycle of business intelligence platform development, including design, coding, testing, and production support in the Controllership in the Office of the Vice President for Finance. She/He will be dedicated to implementing innovative data solutions to ingest and maintain MIT financial data used for reporting and analytics. In addition, she/he will engage in analytical projects, ranging from migration to a new data environment to supporting VPF staff in its strategic, financial, and operational analytical needs. This person will also work as a project team member or project lead for projects that may span a broad range of data-focused applications.

PRINCIPAL DUTIES AND RESPONSIBILITIES (ESSENTIAL FUNCTIONS)

- Design, document, develop, test, implement, and maintain a new VPF business intelligence platform
- Provide data to help business teams drive improvement in key business metrics, customer experience, and business results
- Write, review, and communicate technical design and program specifications
- Pull and merge data from various sources into a central finance repository
- Audit data to ensure quality and validation across all data sources to discover patterns, meaningful relationships, anomalies, and trends
- Troubleshoot and debug programs to solve technical problems
- Check for compliance with technical standards, policies, and procedures
- Build, maintain, and automate extract, transform, and load (ETL) workflows to ensure the integrity of all processes
- Implement data structures using best practices in data modeling, processes, and technologies
- Track data lineage by updating the meta-data repository in service to the data governance program
- Design and maintain dashboards and reports to display platform performance
- Document and then train VPF staff on querying the database using different reporting tools
- Serve as technical expert on business intelligence applications and provide outstanding customer service to effectively diagnose complex issues and offer tailored support to VPF staff

- Work with teams to capture and interpret business and functional requirements and provide innovative solutions
- Optimize, redesign, and improve current report building processes to reduce reconciliation efforts and eliminate data silos
- Network with other data specialists across administrative and academic functions to assess and address the MIT community's evolving needs
- Provide recommendations to improve accounting, data, and reporting processes, review and management of financial data
- May lead ad hoc projects and take on other duties as assigned

QUALIFICATIONS

Required:

- Bachelor's degree
- At least three years related experience in or supporting financial/accounting functions
- At least five years experience building databases, datamarts or data warehouse with structured querying language (SQL) across multiple platforms, preferably Microsoft, Oracle, PostgreSQL, and MySQL
- Experience with ETL software, preferably Talend, Pentaho, SQL Server Integration Services (SSIS), and Informatica
- Experience with Online Analytical Processing (OLAP), visualization and reporting software, preferably SQL Server Analysis Services (SSAS), SQL Server Reporting Services (SSRS), Tableau, Cognos, Business Objects
- Advanced experience with Excel including modeling, PowerPivot, Visual Basic for Applications (VBA)
- Experience working with SAP or equivalent Enterprise resource planning (ERP) systems
- Experience with data profiling, data quality, master data management
- Detail-oriented with excellent problem identification and problem solving skills
- Demonstrated ability to work both independently and as part of a team
- Strong collaborative, proactive, interpersonal, and communication skills
- Ability to collaborate with a diverse group of colleagues from varying backgrounds
- Able to function in a complex, busy, changing environment while meeting necessary deadlines

Preferred:

- Master's degree
- Membership in the Data Management Association (DAMA) and/or The Data Warehousing Institute (TDWI)
- Programming experience: SQL, Visual Basic (VB), Java
- Knowledge of statistics tools: R, Python, SAS, SPSS
- Experience with Agile methodology
- Experience with data governance and data vault design
- Experience with SAP or similar accounting and reporting systems highly desirable
- Experience in higher education or non-profit accounting a plus.

SUPERVISION RECEIVED

Receives supervision from the Manager of Business Intelligence Solutions

SUPERVISION EXERCISED

None

A background check (including checking criminal records) will be required for the final candidate.

MIT is unable to provide work authorization and/or visa sponsorship for this position.

This position has a 6-month probationary period for new employees to the Institute.

MIT considers equivalent combinations of experience and education for certain jobs. All candidates who believe they possess equivalent experience and education are encouraged to apply.

VPF benefits from a diverse and engaged workplace and seeks to further enhance our community by employing individuals from varied backgrounds. VPF actively supports MIT's commitment to advancing a respectful and caring community that embraces diversity and empowers everyone to learn and do their best.

MIT is an equal employment opportunity employer. All qualified applicants will receive consideration for employment and will not be discriminated against on the basis of race, color, sex, sexual orientation, gender identity, religion, disability, age, genetic information, veteran status, ancestry, or national or ethnic origin.