

UW HEALTH JOB DESCRIPTION

Integration Engineer III

Job Code: 330033	FLSA Status: Exempt	Mgt. Approval: B. Larkworthy	Date: June 2024
Department: Information Services		HR Approval: M. Grayson	Date: June 2024

JOB SUMMARY

The Integration Engineer III takes a leading role in the design, implementation, and management of sophisticated system integrations, ensuring they are secure, reliable, resilient, and maintainable. They leverage an extensive range of tools, technologies, and methodologies, to enable seamless data exchange among diverse systems that directly impact patient care and operational efficiency. This role requires an expert understanding of integration architecture, software engineering, networking principles, and cloud technologies to develop strategies for highly available and real time data exchange.

The Integration Engineer III navigates highly complex challenges, often necessitating inventive solutions and a forward-thinking mindset. They are expected to resolve technical issues autonomously, leveraging their expertise and coordinating others when needed. This role involves mentoring other staff members, guiding them through complex problem-solving processes, and sharing advanced knowledge and best practices to enhance the team's overall capabilities and performance.

The Integration Engineer III is responsible for in-depth analyses and defining complex integration requirements, developing and implementing robust integration solutions, and overseeing the lifecycle of multiple concurrent integration projects. This includes assessing system interactions, designing scalable integration platforms, and addressing intricate integration challenges. The Integration Engineer III partners with cybersecurity experts to create integration security standards and ensures security considerations are incorporated into the standard integration development processes so that all integrations adhere to security standards to protect sensitive information. This role leads the proactive monitoring and optimization of the integration environment, establishing high availability and performance standards. The Integration Engineer III must excel in communication with both internal and external stakeholders, steering integration initiatives to align with the organization's broader goals.

The Integration Engineer III collaborates with clinical and administrative staff, external software vendors, and healthcare organizations to design, establish, and enhance effective integrations. The work is pivotal in connecting diverse healthcare systems, facilitating efficient data exchange, and enabling improved clinical and business outcomes. As a team and project leader, the Integration Engineer III delivers top-tier integration solutions across multiple domains.

MAJOR RESPONSIBILITIES

- Lead the design, implementation, and management of complex system integrations across diverse systems and applications, ensuring high availability, security, and performance.
- Oversee the integration engine and API (Application Programming Interface) management platform, managing their configuration, maintenance, and optimization to ensure efficient and reliable operation of integration processes and API lifecycle management.
- Design an extensible and intuitive API structure, ensuring they represent data effectively and facilitate easy integration.
- Develop and review code adhering to software engineering principles, methodologies, and best practices.
- Analyze complex integration requirements, translating business needs into scalable and maintainable integration solutions, overseeing the entire lifecycle of integration projects.
- Design and implement processes to ensure all integrations adhere to security standards, regulatory compliance, and accreditation requirements.
- Establish and lead thorough testing and quality assurance processes for integration solutions, defining testing scenarios, and developing test plans and cases to ensure quality and reliability.
- Design, implement, and enhance integration platforms and processes, monitoring performance and implementing improvements to meet evolving business needs.
- Provide technical leadership in troubleshooting and resolving intricate integration issues.
- Facilitate effective collaboration with internal and external stakeholders.
- Develop, establish standards, and maintain comprehensive documentation for integration systems, including system specifications, modifications, operational guidelines.
- Lead and contribute to major integration projects, coordinating with project management and cross-functional teams necessary to ensure project success.
- Formally mentor other staff and serve as a team expert in integration engineering, sharing expertise and fostering skill development.
- Troubleshoot technical issues, identify the cause, determine possible resolutions, and remediate issues in existing integrations.
- Participate in a 24x7x365 on-call rotation to support applications, promptly responding to incident notifications, and escalating them when necessary.

ALL DUTIES AND REQUIREMENTS MUST BE PERFORMED CONSISTENT WITH THE UW HEALTH PERFORMANCE STANDARDS.

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JOB REQUIREMENTS		
Education	Minimum	Bachelor's degree in Computer Science, Software Engineering, Information Systems, or related field Four (4) years of relevant experience may be considered in lieu of degree
	Preferred	Master's degree in Computer Science, Software Engineering, Information Systems or related field
Work Experience	Minimum	<ul style="list-style-type: none"> • Demonstrated success designing and implementing extensible and reusable integrations between applications • Demonstrated success managing integration platforms and integration life cycles • Demonstrated success implementing and leveraging modern integration technologies, effectively addressing challenges related to data consistency, authentication, security, and error handling • Demonstrated success identifying and implementing improvements in platforms, standards, and processes leading to increased operational excellence, elimination of waste, and reduced technical debt • Demonstrated success managing and executing medium to large scale projects
	Preferred	<ul style="list-style-type: none"> • Seven (7) years of experience in integration engineering, including system integration design, development, and management • Demonstrated success working on or leading initiatives that use agile methods • Demonstrated experience developing integrations using healthcare data standards such as HL7, FHIR, and X12 • Demonstrated experience designing and implementing APIs using REST and/or GraphQL with a focus on usability and effective data representation • Experience managing and optimizing integration platforms in Microsoft Azure or cloud platforms • Experience designing cloud-native services and features to implement integrations in Microsoft Azure or other cloud platforms • Experience using DevOps tools and practices, including version control, automated build, testing, continuous integration, and continuous deployment processes[WC1][LBR2] • Experience providing on-call support for critical integration systems in a 24x7x365 environment
Licenses & Certifications	Minimum	None
	Preferred	<ul style="list-style-type: none"> • Certified Cloverleaf Developer • Epic Interface Administrator (Bridges) or other Epic certifications • Microsoft Azure Administration, Developer, DevOps, or related certifications • ServiceNow Administration, Developer, or related certifications • Professional Scrum Master, Developer, Product Owner, or related certifications • ITIL Foundation or related certifications • PMP
Required Skills, Knowledge, and Abilities		<p><u>Information Services (IS) Core Competencies:</u> Intermediate competency in the following:</p> <ul style="list-style-type: none"> • Communication • Critical Thinking • Effective Team Member • Agility • Mentor and Teach • Leadership • Technical Leadership • Leading without Direct Authority • Leading Highly Empowered, Self-Directed Teams • Lean Management <p>Emerging competency in the following:</p> <ul style="list-style-type: none"> • Organizational Awareness/Understanding • Demonstrates Business & Financial Acumen • Maintains Strategic Orientation <p><u>Position Specific Competencies</u> Advanced competency in at least two (2) and intermediate competency in the remaining of the following:</p> <ul style="list-style-type: none"> • System Analysis & Design

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	<ul style="list-style-type: none">• Data Flow Architecture• Software Testing• Continuous Improvement• Technology Awareness & Strategic Planning• Network infrastructure components and concepts• Project Management <p>Other Knowledge, Skills, & Abilities:</p> <ul style="list-style-type: none">• Knowledge of programming languages such as C#, Python, and JavaScript• Understanding of common data exchange formats such as HL7, JSON, and XML• Ability to lead as a member of an agile development team• Ability to drive cross-functional areas including leaders and stakeholders• Exceptional ability to think abstractly and apply these concepts to concrete problems• Demonstrated ability and desire to quickly learn and apply new technical knowledge and skills• Demonstrated ability to adapt to new and changing technologies• Strong logical thought process for design and analysis• Outstanding analytical, critical thinking, problem-solving, and organizational abilities with attention to detail• Ability to synthesize feedback and go beyond specific improvement suggestions																												
PHYSICAL REQUIREMENTS																													
Indicate the appropriate physical requirements of this job in the course of a shift. <i>Note: reasonable accommodations may be made available for individuals with disabilities to perform the essential functions of this position.</i>																													
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Note: The purpose of this document is to describe the general nature and level of work performed by personnel so classified; it is not intended to serve as an inclusive list of all responsibilities associated with this position.