UW HEALTH POSITION DESCRIPTION

DevOps Engineer Principal

Job Code: 320032	**FLSA Status: Exempt**	**Mgt. Approval: B. Larkworthy/N. Locke**	**Date: August 2023**
Department/Number: Information Systems		**HR Approval: M. Grayson**	**Date: August 2023**

POSITION SUMMARY

The DevOps Engineer Principal is a technical leader responsible for overseeing the design, creation, and adoption of DevOps practices and capabilities. Guiding all aspects of DevOps, the Principal defines the design and implementation of these systems and sets organizational standards. The DevOps Engineer Principal orchestrates strategies across teams and departments, ensuring systems are built to meet the requirements of diverse teams such as engineering, analytics, infrastructure, and cybersecurity. They participate in the evaluation and selection of specific tools, platforms, and technologies to support DevOps practices.

The DevOps Engineer Principal directs and influences cross-functional collaboration, working in partnership with leaders in areas like software engineering, infrastructure, cybersecurity, and analytics. The Principal leverages their expertise to envision and lead the development of advanced automated processes, crafting the way integrated solutions are consistently developed and deployed across both on-premises and cloud systems. The DevOps Engineer Principal defines and reinforces standards, ensuring that cybersecurity and software quality best practices are seamlessly integrated into organizational processes.

The DevOps Engineer Principal is a leader in shaping the DevOps practices and capabilities across teams and departments. The Principal oversees enterprise-level projects, large-scale initiatives, and contributes to long-term organizational planning and intricate problem solving. This includes leading and facilitating organizational changes related to new DevOps processes and practices, such as training, documentation, and fostering cultural shifts. As an organizational leader, the DevOps Engineer Principal mentors and guides engineers and colleagues across teams and departments, instilling a culture of excellence, continuous improvement, and collaboration.

MAJOR RESPONSIBILITIES

- Lead technical teams that design, configure, and maintain infrastructure and/or cloud resources to support applications through all phases of the software development life cycle (SDLC), ensuring alignment with organizational strategy and best practices.
- Direct the design, creation, and maintenance of continuous integration and deployment (CI/CD) pipelines, emphasizing scalability, efficiency, and adherence to industry standards.
- Oversee the design, development, and integration of scripts to automate software testing and other processes, enforcing software engineering best practices.
- Manage the creation and ongoing optimization of processes to proactively monitor, patch, troubleshoot, and resolve build and deployment pipelines and infrastructure issues.
- Steer the automation of infrastructure and/or cloud resource deployments and configuration using infrastructure-as-code tools.
- Lead and mentor engineering teams in creating CI/CD pipelines for their applications, ensuring proper code integration.
- Act as decision maker and subject matter expert on the configuration of development environments for consistency across devices and alignment with SDLC and security standards.
- Champion the design and configuration of the version control system, aligning it with SDLC, security policies, and industry best practices.
- Oversee the design and enforcement of security testing and vulnerability scanning and integrate it into the development process.
- Accountable for analyzing findings from vulnerability scanning and penetration testing across the environment and leading the remediation processes across teams.
- Strategize, research, and lead execution of technological components and services that align and support business needs.
- Regularly engage with technical business staff, customers, project sponsors, and stakeholders, keeping them informed and aligned, gathering feedback, and making necessary adjustments.
- Develop and lead training on both new and existing functionality.
- Formally teach and mentor other staff in DevOps concepts and processes, fostering a culture of continuous learning and improvement.
- Cultivate cross-functional collaboration across teams and departments aligning goals and strengthening cooperation among technical leaders.
- Proactively engage with key partners to identify areas for automation to enhance efficiency, reduce costs, and drive organizational improvement.
- Lead change management initiatives to ensure seamless adoption of new technologies and processes.
- Leverage multivendor APIs (application programming interfaces) and scripting to create and enhance solutions.
- Engage internal departments and third-party vendors for security and infrastructure support and best practices.
- Resolve intricate technical issues, lead root cause analysis, and design remediations to prevent recurrence.
- 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 Healthcare, Information Technology, Business, or related field Four (4) years combination of relevant experience and education may be considered in lieu of degree
	Preferred	Bachelors or Master's degree in Computer Science, Software Engineering, Systems Engineering, Information Technology, or related field strongly preferred
Work Experience	Minimum	- Demonstrated success overseeing the design, creation, and deployment DevOps capabilities such as automated build, testing, continuous integration, and continuous deployment processes - Demonstrated fluency in multiple scripting or programming languages - Demonstrated success designing, administering, and using version control systems such as Git - Demonstrated success administering Windows and/or Linux environments - Demonstrated success using configuration management and orchestration technologies - Demonstrated success implementing automated software testing and code analysis tools and processes - Demonstrated success using modern API and other application integration technologies - Demonstrated success leading people and projects in an environment using modern DevOps processes - Demonstrated success shaping the direction of DevOps design and integration methods - Demonstrated success managing and executing large scale projects
	Preferred	- Seven (7) years of professional experience designing DevOps capabilities such as automated build, testing, continuous integration, and continuous deployment processes - Experience leading the deployment of infrastructure and application resources in a cloud platform such as Azure - Experience leading the administration and maintenance of the GitHub platform, including GitHub Advanced Security - Experience designing and creating CI/CD pipelines using YAML - Experience with container system such as Docker
Licenses & Certifications	Minimum	None
	Preferred	- Microsoft Azure or AWS Administrator, Developer, DevOps, or related certifications - ITIL Foundation or related certifications
Required Skills, Knowledge, and Abilities		Advanced competency in the following areas: - Technical leadership of applicable products or platforms - Communication - Effective Team Member - Critical Thinking Advanced competency in at least three (3) and Intermediate competency in the remaining of the following: - Continuous Integration and Delivery - Systems Analysis & Design - Continuous Improvement - Enterprise Automation - Technology Awareness & Strategic Planning - Writing Documentation and Deliverables - Product Management Intermediate competency in the following: - Agility - Mentor and Teach - Leadership - Leading without Direct Authority - Leading Highly Empowered, Self-Directed Teams - Lean Management

UW HEALTH POSITION DESCRIPTION

- Organizational Awareness/Understanding
- Demonstrates Business & Financial Acumen
- Maintains Strategic Orientation

Other Knowledge, Skills, & Abilities:
- Demonstrated ability to drive cross-functional areas including leaders and stakeholders
- Ability to provide remote and verbal computer and application support to end-users
- Strong attention to detail with a high level of thoroughness
- Demonstrated ability to troubleshoot and identify the cause of server and software issues
- Demonstrated ability and desire to quickly learn and apply new technical knowledge and skills
- Demonstrated ability to adapt to new and changing technologies
- Ability to synthesize ambiguous and inconsistent feedback and input

PHYSICAL REQUIREMENTS

Indicate the appropriate physical requirements of this job in the course of a shift. *Note: reasonable accommodations may be made available for individuals with disabilities to perform the essential functions of this position.*

	Physical Demand Level	Occasional Up to 33% of the time	Frequent 34%-66% of the time	Constant 67%-100% of the time
x	**Sedentary:** Ability to lift up to 10 pounds maximum and occasionally lifting and/or carrying such articles as dockets, ledgers and small tools. Although a sedentary job is defined as one, which involves sitting, a certain amount of walking and standing is often necessary in carrying out job duties. Jobs are sedentary if walking and standing are required only occasionally and other sedentary criteria are met.	**Up to 10#**	**Negligible**	**Negligible**
	Light: Ability to lift up to 20 pounds maximum with frequent lifting and/or carrying of objects weighing up to 10 pounds. Even though the weight lifted may only be a negligible amount, a job is in this category when it requires walking or standing to a significant degree.	**Up to 20#**	**Up to 10#** or requires significant walking or standing, or requires pushing/pulling of arm/leg controls	**Negligible** or constant push/pull of items of negligible weight
	Medium: Ability to lift up to 50 pounds maximum with frequent lifting/and or carrying objects weighing up to 25 pounds.	**20-50#**	**10-25#**	**Negligible-10#**
	Heavy: Ability to lift up to 100 pounds maximum with frequent lifting and/or carrying objects weighing up to 50 pounds.	**50-100#**	**25-50#**	**10-20#**
	Very Heavy: Ability to lift over 100 pounds with frequent lifting and/or carrying objects weighing over 50 pounds.	**Over 100#**	**Over 50#**	**Over 20#**
List any other physical requirements or bona fide occupational qualifications:		•		

Work/Environmental: Moderate noise level consistent with an office environment

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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.