



Amherst College
Office of Human Resources

JOB
DESCRIPTION

Title: Cloud Engineer

Department: Enterprise Applications Reports to title: Director of IT Infrastructure

Full Time: X Part Time: _____ Date Prepared: 7/18/2019

Job Group & Level: PT-5 Regular Daily Work Schedule: _____

Pay Type: Weekly _____ Monthly X Months Per Year: 12 Hours Per Week: 40

(Summer Months) Months Per Year: Hours Per Week: _____

1. Summary of Position:

The Cloud Engineer will discover and interpret the college's technical and operational requirements and translate them into viable technical solutions within a cloud-first solutions strategy. The engineer recommends best practices for the migration of services traditionally hosted on site to cloud services and a cloud infrastructure. In coordination with the Director of IT Infrastructure and members of the larger Information Technology team, implements planned migrations with a keen eye on best practices and resiliency.

Amherst College IT is quickly moving towards a cloud-first solutions strategy, and the engineer will play a key role in designing, migrating services currently hosted on premise, and implementing a new, integrated architecture for the college's information systems.

The Cloud Engineer will be working in a diverse workforce and participate in the College's efforts to create a respectful, inclusive, and welcoming work environment.

2. Principal Duties and Responsibilities:

55% Infrastructure Management:

- Work closely with operations and development personnel to provision, support and troubleshoot cloud and hybrid infrastructure.
- Provide day to day support of operational environments.
- Maintain a highly available infrastructure with a keen eye on resiliency.

- Provide application support.
- Understand and contribute to the creation of system support documents and build scripts/Cloud Formation templates for cloud and hybrid environment configuration.
- Operate within our security and privacy guidelines, and help guide our future security posture in relation to cloud architecture.
- Collaborate with a diverse staff and contribute to an inclusive work culture.

20% Design and Implementation:

- Design technical architectures that fulfill business strategies based on industry and organizational standards, patterns and best practices.
- Orchestrate implementation of proposed solutions on small and medium sized projects.
- Assess, Design, develop, and analyze Public, Private, Hybrid Cloud architecture.
- Determine Cloud, data and application architecture solutions that meet performance, scalability, reliability, and security needs.
- Lead on architectural governance and decisions related to tools, technology and system tradeoffs as part of a cross functional architecture decisions.

20% Systems Integration:

- Research and recommend cloud-based technologies to improve the current systems in support of the organization's strategic vision.
- Lead in the design and development of integration among the college's information systems.
- Lead in preparing and supporting architectural governance and decisions related to tools and technology and system choices.
- Plan, schedule, and implement migrations from on-premises data center solutions to cloud architectures.

5% Perform other duties/functions as requested.

All employees are expected to participate in the College's efforts to create a respectful, inclusive, and welcoming work environment.

3. Internal-External Interaction/Communication:

Frequent interaction and communication with faculty and staff, as well as regular communication with software and hardware vendors and external service contractors negotiating contracts, licenses, fees, etc.

4. Education: (include certifications and licenses)

Required:

Bachelor's Degree or certifications directly related with cloud services, such as AWS Solutions Architect Professional Or Associate's Degree, and 5 years of relevant experience directly related with cloud architecture, migration from on premise infrastructure, and implementation of cloud infrastructure.

5. Experience: (List specific skills necessary to perform this

job)

Required:

- Demonstrated experience with the migration of services on premise to cloud infrastructure, with a focus on AWS.
- Cloud computing architecture, technical design and implementation including "right fit" leverage of Infrastructure as a Service (IaaS), Platform as a Service (PaaS) and Software as a Service (SaaS) delivery models
- Strong understanding across Cloud and infrastructure components (server, storage, network, data, and applications) to deliver end to end Cloud Infrastructure architectures and designs.
- Strong hands-on experience with scripting languages.
- 4 years of experience as an IT Infrastructure Engineer with a focus on cloud services such as AWS compute, storage, and networking environments.
- Commitment to or experience working with a diverse community.

Preferred (skills/experience):

- Microservice and cloud-native architecture with a focus on AWS.
- Serverless and container hosting strategies.
- NoSQL non-relational databases.
- CI/CD pipelines.
- Integrating separate applications for sharing data.
- Asynchronous processing methods.
- MS Core Technologies.
- Cloud application development: DevOps, Infrastructure as Code.
- Strong understanding last scale distributed data technologies Hadoop, Hive, MR / Spark.

6. Environmental and Physical Demands: (Please describe the work environment and unusual physical demands, i.e. lifting requirements.)

- Repetitive hand motions - fingers, hands, and wrists.
- Ability to operate, activate, prepare, position, inspect and assess the proper functionality of computer, keyboard, mouse and A/V systems.
- Traverse campus throughout the year regardless of weather.
- Occasional exposure to outdoor elements, and fluctuations in temperature and humidity.
- Frequent standing, sitting, stooping, kneeling, bending, crawling, reaching.
- Ascending and descending stairs.
- Ability to access small spaces.
- Ability to lift, carry, push and pull up to 25 lbs.
- Visual – normal concentration.

7. Decision Making:

- The Cloud Engineer will make decisions individually and jointly in team environments within IT and in collaboration with campus administrative staff.

8. Supervision Exercised/Received:

- Works with a high degree of independence.

Supervisory Responsibility: Yes _____ No X_____

Number of Employees Supervised: _____