

# Cloud Engineer

## Overview

A Cloud Engineer is responsible for designing, building, and maintaining cloud-based infrastructure and processes to support data and application solutions. The role emphasizes implementing governance, best practices, and security measures while optimizing cloud costs. This individual will leverage Infrastructure as Code (IaC) and Continuous Integration/Continuous Deployment (CI/CD) pipelines to ensure scalability, efficiency, and security. They will work as part of the platform team in close collaboration with various groups, including data governance and data engineering.

## Roles and Responsibilities:

- Collaborate closely with data teams to support the development and deployment of innovative and efficient data solutions.
- Respond to and fulfill platform requests from various NFL data teams, including internal business stakeholders, data analytics professionals, data engineers, and quality assurance teams.

## Required Skill Sets:

- Hands-on experience with AWS, including familiarity working with the following services:
  - Analytics:
    - Athena
    - Glue
    - Redshift
  - Application Integration:
    - EventBridge
    - MWAA
    - SNS
    - SQS
  - Compute:
    - EC2
    - Lambda
  - Containers:
    - ECR
    - ECS
  - Database:
    - DynamoDB
    - RDS
  - Developer Tools:
    - CDK
    - CloudFormation
    - CodeBuild
    - CodeCommit
    - CodePipeline
  - Management & Governance:
    - CloudTrail
    - CloudWatch

- Network:
  - API Gateway
  - VPC
- Security, Identity & Compliance:
  - IAM
  - KMS
  - Secrets Manager
- Storage:
  - S3
- Well-versed in the core principles of the AWS Well-Architected Framework, encompassing its five foundational pillars: Operational Excellence, Security, Reliability, Performance Efficiency, and Cost Optimization.
- Strong problem-solving abilities and a passion for tackling complex challenges collaboratively and independently.
- Proactive, detail-oriented self-starter with excellent organizational skills.
- Exceptional communication skills, with the ability to present findings effectively to both technical and non-technical audiences.
- Previous experience in AWS infrastructure operations, including monitoring, troubleshooting & supporting cross functional teams.
- Proficiency in optimizing AWS resources to enhance performance and scalability while reducing costs.
- Working knowledge of CI/CD pipelines and build/test/deploy automation tools. ●
- Experience in environments leveraging IaC tools (e.g., CDK & AWS CloudFormation). ●
- Proficient in Python, with intermediate-level expertise in developing scripts, automating workflows, and implementing solutions using AWS Cloud Development Kit (CDK) and boto3 ●
- Extensive expertise in implementing security best practices, including the design and management of AWS IAM policies, encryption using AWS Key Management Service (KMS), and robust data protection mechanisms. Adept at adhering to the principle of least privilege to ensure secure and efficient access control.
- Active participation in defining cloud strategies and evaluating emerging technologies and AWS services.
- Proficient in working within agile environments, with a strong understanding of agile methodologies.
- Experienced in utilizing JIRA to manage backlogs and sprints, as well as leveraging JIRA Service Management to support ticketing and operational workflows.

### Preferred Qualifications

- A university degree in Computer Science, Engineering, or a related field.
- A minimum of 3 years of experience in data engineering or production support. ●
- Further hand-on experience with AWS, including familiarity working with the following additional services (*nice to have, not required*):
  - Analytics:
    - Clean Rooms
    - Kinesis Analytics/Flink, Data Streams & Firehose
    - MSK
    - Quicksight
    - Sagemaker
  - Application Integration:
    - Step Functions

- Compute:
  - AppRunner
  - Batch
  - EC2 Image Builder
- Containers:
  - EKS
- Database:
  - Aurora
  - ElastiCache
- Developer Tools:
  - CodeArtifact
  - CodeDeploy
  - X-Ray
- Management & Governance:
  - AWS Organizations
  - Grafana
  - Lake Formation
  - Prometheus
  - Systems Manager
- Network & Content Delivery:
  - CloudFront
  - Route 53
- Security, Identity & Compliance:
  - Certificate Manager
  - Cognito
  - Identity Centre
  - WAF & Shield
- Storage:
  - AWS Backup
  - S3, specifically with Hudi, Iceberg or other Open Table Data Lake formats.
  - Glacier
- Experienced in building data platforms, with a strong understanding of Data Lake, Data Warehouse, and Lakehouse architectures.
- Possess intermediate proficiency in SQL, with the ability to write and optimize queries for data retrieval, transformation, and analysis.
- Demonstrated expertise in resiliency planning and the development and implementation of disaster recovery strategies.
- Proven ability to implement integration services with secure authentication and authorization protocols, such as OAuth 2.0, OpenID Connect (OIDC), and SAML.

#### **Other Key Attributes**

- Superior written and verbal communication skills.
- A positive contributor who excels as part of a team and empowers others.
- Effective collaborator with strong interpersonal skills.
- Strong time management and organizational abilities.

#### **Terms / Expected Hours of Work**

- 40 hours per week.
- Offshore working hours as required.