

Moonfare Data Engineer Interview Guide – Experienced 7+

Round 1: Get to Know You

1. AWS Services

Discussed the AWS services I have experience with, such as S3, Lambda, DynamoDB, Kinesis, Glue, and Step Functions.

Example Questions:

- Which AWS services do you use for data ingestion and processing?
- How do you handle data cleanup and lifecycle management in S3?

2. Pipeline Monitoring

I shared strategies for monitoring pipelines using tools like **CloudWatch**, **Datadog**, or custom alerting setups with **SNS** and **Lambda triggers**.

Example Questions:

- How do you handle pipeline failures or delays?
- Which metrics are critical to monitor?

3. About Moonfare

Explained what I knew about Moonfare's business model, emphasizing private equity investments and technology-driven solutions.

Example Questions:

- What attracts you to working at Moonfare?
- How can technology improve private equity investments?

4. Agile Task Prioritization

Discussed my approach to prioritizing tasks using **backlog grooming** and tools like **JIRA**, emphasizing collaboration with product owners and stakeholders.

Example Questions:

- How do you manage competing priorities in an Agile environment?
- Can you share a time when you had to shift focus due to urgent tasks?

Round 2: Managerial Interview

1. Project Discussion

Described key projects, emphasizing data pipelines, ETL jobs, and the tech stack used (Spark, Python, AWS).

2. Moonfare's Tech Stack

The manager shared insights about Moonfare's architecture, tools, and their data processing approach. I asked follow-up questions about scalability and optimization.

Example Questions:

- What's the biggest technical challenge Moonfare faces in handling data?
- How does your tech stack support scalability and analytics?

Round 3: Technical (HackerRank Test)

Section 1: AWS

- **S3 Cleanup Command:** Wrote a script for managing and cleaning up outdated S3 objects using **lifecycle policies** or direct deletion commands.
- **CDC During Migration:** Explained approaches for real-time **Change Data Capture (CDC)** using tools like **AWS DMS** and **Kinesis**.
- **Lambda, Kinesis, DynamoDB:** Solved a question involving data streaming and persistence with a combination of **Lambda** triggers from Kinesis to DynamoDB.

Section 2: ScalaSpark

Worked on **healthcare data cleaning** using ScalaSpark, focusing on transformations and data normalization.

Example Task:

- Remove duplicates, fill missing values, and apply schema validation.

Section 3: Python

Implemented a context manager class for a sequence generator, leveraging Python's `__enter__` and `__exit__` methods.

```
class SequenceGenerator:
    def __init__(self, start, step):
        self.start = start
        self.step = step

    def __enter__(self):
        return self.generate()

    def __exit__(self, exc_type, exc_value, traceback):
        pass

    def generate(self):
        current = self.start
        while True:
            yield current
            current += self.step
```

Preparation Tips:

- **AWS Mastery:** Focus on serverless architecture, data streaming, and storage optimization.
- **ScalaSpark Skills:** Practice transformations, data cleaning, and handling large datasets efficiently.
- **Python Context Managers:** Understand custom context managers and generators.
- **Agile Methodologies:** Be ready to discuss task prioritization and teamwork in an Agile setting.

Glassdoor Moonfare Review –

https://www.glassdoor.co.in/Overview/Working-at-Moonfare-EI_IE2268718.11,19.htm

Moonfare Careers –

<https://www.moonfare.com/careers>

Subscribe to my YouTube Channel for Free Data Engineering Content –

<https://www.youtube.com/@shubhamwadekar27>

Connect with me here –

<https://bento.me/shubhamwadekar>

Checkout more Interview Preparation Material on –

https://topmate.io/shubham_wadekar