Monitoring DynamoDB Tables with CloudWatch

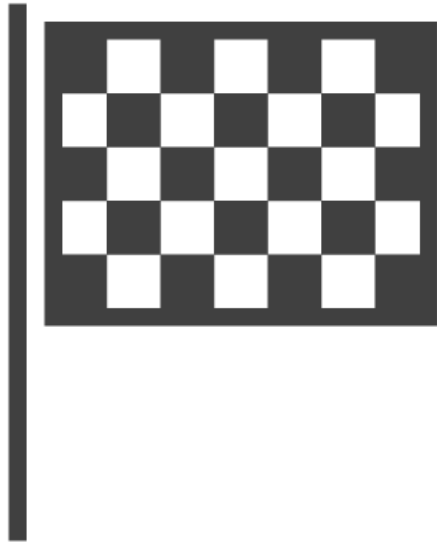**Stefan Roman**
DEVOPS ENGINEER

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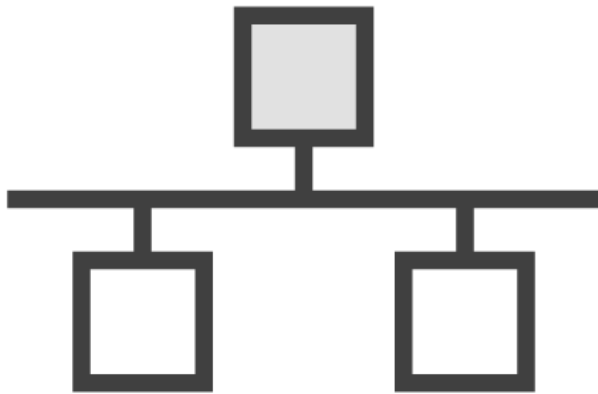
Understanding Concepts of Monitoring

Monitoring Goals:
- Performance
- Availability

Understanding Concepts of Monitoring

Resources to monitor:

- Environments
- Specific tables
- Temporary dev monitors

Understanding Concepts of Monitoring

Tools to use:
- Active monitoring
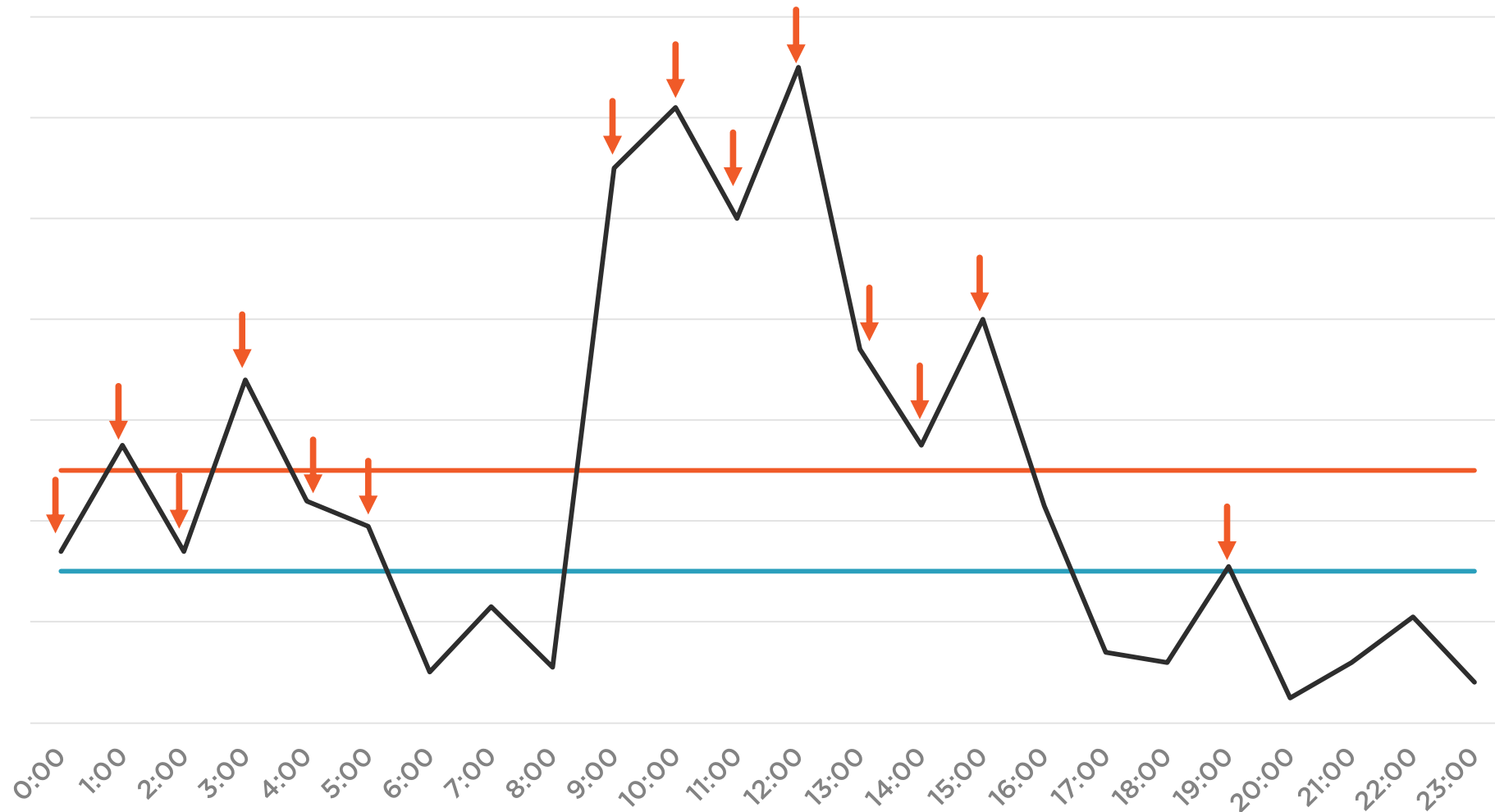- Passive monitoring

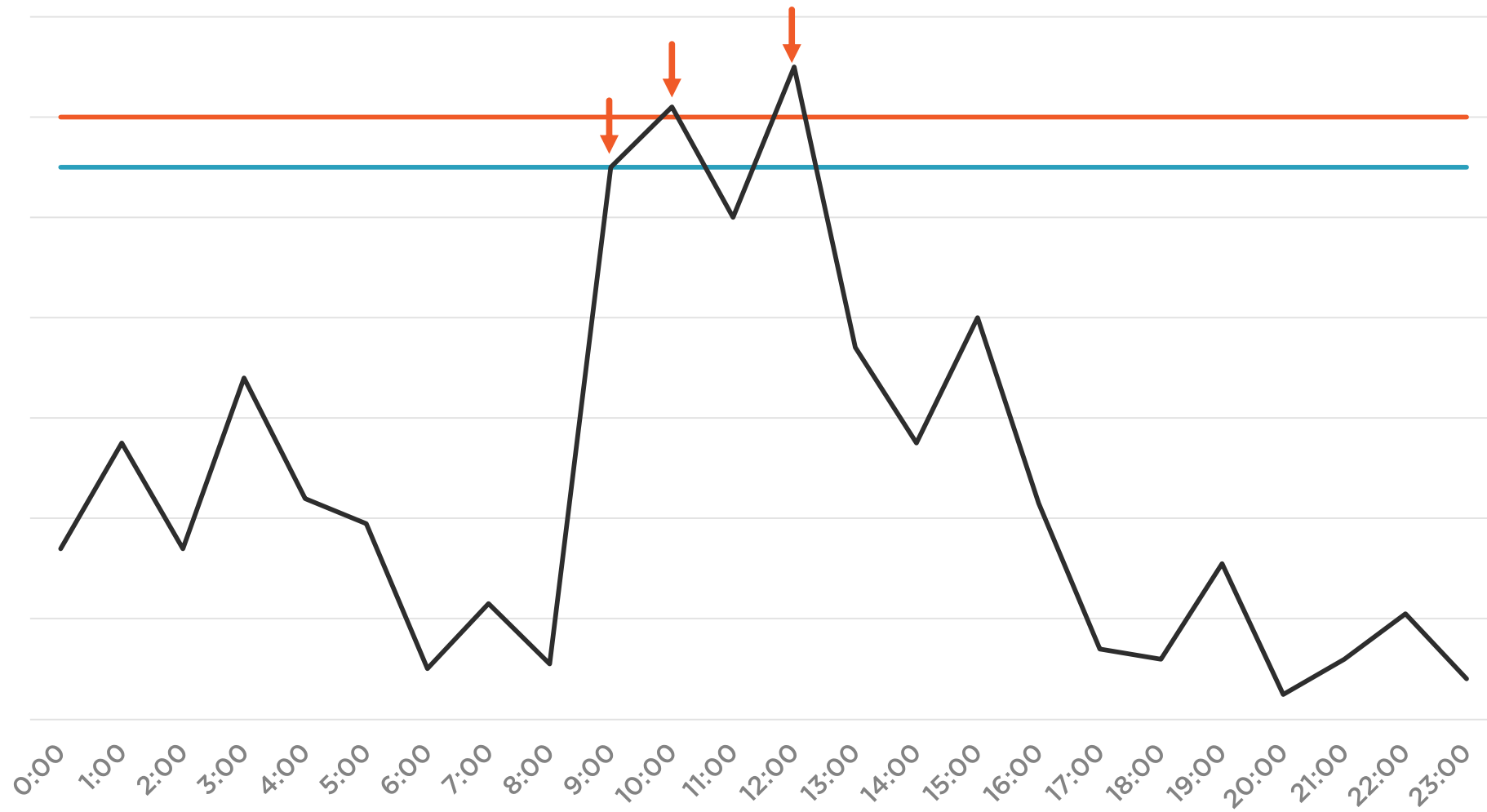# Understanding Concepts of Monitoring

People responsible:

- Who will be contacted

Understanding Concepts of Monitoring

Understanding Concepts of Monitoring

Understanding DynamoDB Metrics

Capacity Monitoring:

ConsumedReadCapacityUnits

ConsumedWriteCapacityUnits

Understanding DynamoDB Metrics

Throttling Monitoring:
```
WriteThrottleEvents
ReadThrottleEvents
ThrottledRequests
```

Understanding DynamoDB Metrics

Error Monitoring:
UserErrors
SystemErrors

Understanding DynamoDB Metrics

Other relevant metrics:

PendingReplicationCount

ReplicationLatency

SuccessfulRequestLatency

TimeToLiveDeletedItemCount

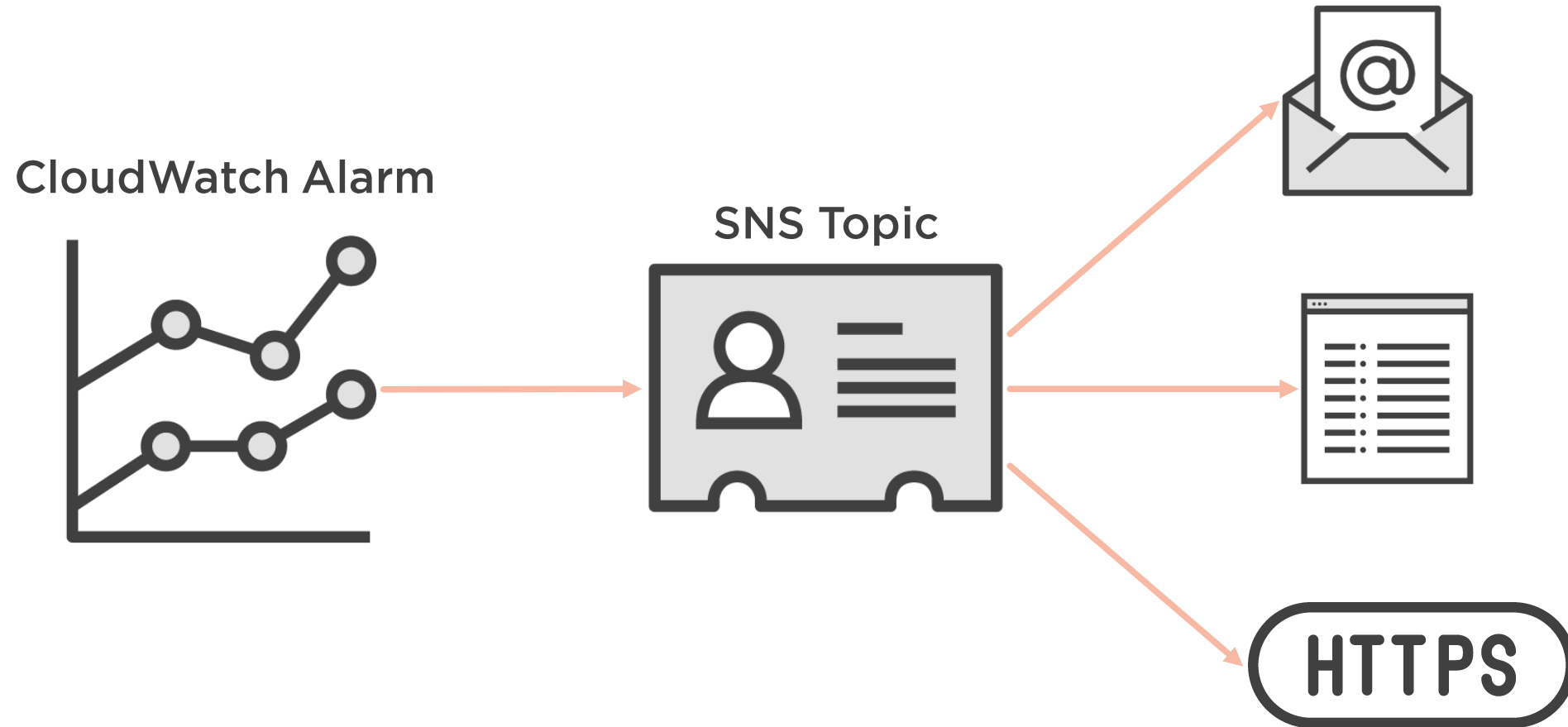# Active Monitoring of DynamoDB Tables

CloudWatch Alarms

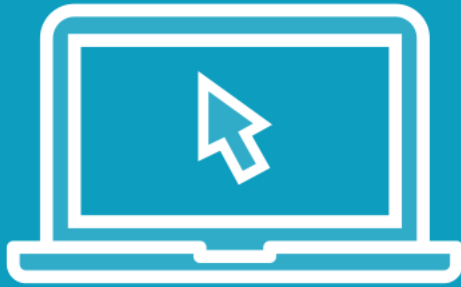Send notifications when values are over thresholds

CloudWatch Events

Send notifications when system events occur

Active Monitoring of DynamoDB Tables

Demo

Create active monitoring for *elaborate_employee_table*

Create and configure SNS topic

Create metrics with random thresholds

Generate traffic with a script

Demo

Create SNS topic

Configure CloudWatch events

Make changes to our
elaborate_employee_table

Investigate events

Passive Monitoring of DynamoDB Tables

CloudWatch Logs

Investigating past events

Metric Graphs

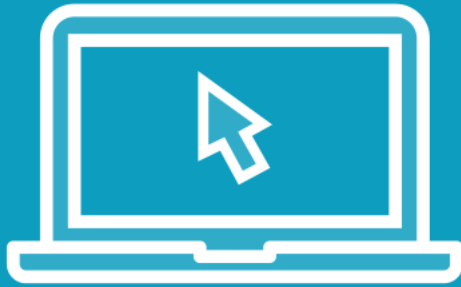Observe trends or investigate past events

Metric Dashboards

Overview of metric graphs

Demo

Create passive monitoring for
elaborate_employee_table

Produce read and write traffic

Summary

Monitoring concepts

Threshold settings

Specific DynamoDB metrics

Active monitoring
- CloudWatch Alarms
- CloudWatch Events

Passive monitoring
- CloudWatch Dashboard