

Mathias Modin

Lead Data Engineer & Infrastructure Manager

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SUMMARY

Lead Data Engineer and Infrastructure Manager responsible for the architecture, delivery, and operation of production data systems. I design AWS-based data platforms with real-time replication, streaming ingestion, orchestration, fault-tolerant ETL, infrastructure-as-code, and operational monitoring across analytical and transactional systems.

HIGHLIGHTS

- Own data architecture and platform design across AWS infrastructure, streaming ingestion, orchestration, ETL, monitoring, and database operations.
- Build idempotent, fault-tolerant pipelines using AWS DMS, Kinesis, Firehose, Lambda, Fargate, Step Functions, Glue, EMR, Spark, and Apache Iceberg.
- Lead data engineering and DBA delivery across MongoDB Atlas, DynamoDB, PostgreSQL, MySQL, Redshift, Elasticsearch, and cloud-native analytical systems.

EXPERIENCE

Lead Data Engineer & Infrastructure Manager, Kushki 2021 - Present

Remote / Latin America

- Lead architecture and operation of Kushki's AWS data platform, including networking, real-time replication, streaming ingestion, orchestration, ETL, data lake storage, and monitoring.
- Design data systems and platform patterns across analytical and operational domains, aligning ingestion, storage, transformation, serving, access control, and reliability requirements.
- Build idempotent and fault-tolerant data pipelines using AWS DMS, Kinesis, Firehose, Lambda, Fargate, Step Functions, Glue, EMR, Spark, and Apache Iceberg.
- Automate platform infrastructure and deployments with AWS CDK, Python, CI/CD pipelines, and reusable infrastructure-as-code components.
- Operate production analytical and transactional systems across MongoDB Atlas, DynamoDB, PostgreSQL, MySQL, Redshift, Elasticsearch, and Iceberg.
- Implement reliability patterns including automated alerting, queue-based monitoring, DLQ handling, replay workflows, and failure recovery.
- Develop MongoDB Atlas stream processing, triggers, and App Services integrations for near-real-time operational data workflows.
- Manage data engineers and DBAs responsible for platform delivery, database lifecycle management, production support, and data infrastructure reliability.

Risk Data Scientist, Worldline 2021

Stockholm, Sweden

- Led a risk data management project to centralize merchant risk reporting and advanced analytical capabilities on Azure with Power BI as the frontend.
- Supported credit risk, fraud risk, and scheme management risk workflows with more consistent reporting and analytical foundations.

Data Analyst & Data Scientist, Risk & Compliance, Worldline 2017 - 2021

Stockholm, Sweden

- Developed and maintained internal BI tools, ETL pipelines, reporting workflows, and database processes across cloud and local environments.
- Created KPIs, data mining workflows, and predictive models for risk and compliance teams using R, Python, SQL, Oracle BI, Linux, Oracle, AWS, and Google Cloud.

Frankfurt am Main / Stockholm

- Research, teaching, and financial stability roles focused on econometrics, statistics, R/Stata, and firm-level financial data.
- Supported financial stability research at Deutsche Bundesbank and taught microeconomics, econometrics, statistics, and R programming at Stockholm University.

SELECTED WORK

Real-Time AWS Data Lake Platform

Designed an AWS data lake platform combining DMS replication, Kinesis/Firehose streaming, Glue/EMR ETL, Step Functions orchestration, and Apache Iceberg tables.

AWS · DMS · Kinesis · Glue · EMR · Apache Iceberg

Fault-Tolerant Pipeline Operations

Built queue-based monitoring, alerting, DLQ handling, replay mechanisms, and idempotent processing patterns for production data pipelines.

Queues · DLQ · Monitoring · Replay · Idempotency

MongoDB Atlas Operational Integrations

Implemented Atlas stream processing, triggers, and App Services integrations for near-real-time workflows across operational MongoDB clusters.

MongoDB Atlas · Stream Processing · Triggers · App Services

Infrastructure-as-Code Data Platform

Automated deployment of data infrastructure with AWS CDK, Python, CI/CD pipelines, and reusable platform components.

AWS CDK · Python · CI/CD · Infrastructure as code

SKILLS

AWS data platform: AWS CDK · DMS · Kinesis · Firehose · Lambda · Fargate · Step Functions · Glue · EMR · VPC/networking

Data architecture & processing: Apache Iceberg · Spark · PySpark · Python · SQL · Streaming ingestion · ETL/ELT · Idempotent pipelines · Fault tolerance

Databases & systems: MongoDB Atlas · DynamoDB · PostgreSQL · MySQL · Redshift · Elasticsearch · Database operations · Linux

Leadership & operations: Data architecture · Team leadership · Platform architecture · DBA management · Monitoring · Alerting · DLQ handling · Replay workflows · Stakeholder collaboration

Agentic workflows: MCP integrations · AI-assisted data operations · Data automation

EDUCATION

Stockholm University

Master's studies in
Econometrics

2014 - 2016

Stockholm University

Bachelor's degree in
Economics

Bachelor's degree in Statistics
2011 - 2014

LANGUAGES

Swedish native · English
fluent · Spanish intermediate ·
German beginner
