Ted Strall

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# Professional Summary

**Cloud Infrastructure Engineer** with a focus on scalable system design, automated deployment pipelines, and secure AWS architecture. Creator of Adage and Karma, open-source frameworks for modular infrastructure and graph-based system tracking.

Experienced with Terraform, Kubernetes, Jenkins, and modern AWS services including Lambda, Fargate, EKS, Cognito, and RDS. Support developer workflows with CI/CD, observability, and secure, automated infra that just works.

# Experience

## Senior Cloud Infrastructure Engineer

Sparksoft (via TISTA) – Remote
Jul 2023 – Mar 2025

* Took ownership of a complex Oracle-to-Oracle data migration involving 200+ interdependent SQL scripts tied to production workloads on EKS.
* Fully automated the 14-hour migration process into a single-command workflow, replacing manual CI/CD steps with a DevOps-standard deployment model.
* Worked closely with data scientists and the client to identify and resolve legacy data quality issues ahead of the migration.
* Took ownership of the post-migration data model and aligned it with CMS standards through direct collaboration with analysts, developers, and DBAs.
* Re-architected the EKS cluster lifecycle using Terraform, improving reliability and consistency across environments.
* Implemented secrets orchestration via Secrets Manager.
* Enhanced observability with CloudWatch metrics, Datadog traces, and custom Grafana dashboards to surface systemic and performance issues.
* Designed and automated a repeatable Oracle RDS to Aurora PostgreSQL migration framework using Terraform, AWS SCT, DMS, and Git workflows—enabling rapid conversion testing via disposable environments.
* Provided hands-on support during production incidents, root cause analysis (RCA) and issue remediation.
* Worked directly with non-technical stakeholders to surface blockers, clarify priorities, and drive delivery.

## Senior Cloud Engineer

TISTA Science and Technology – Remote
Jun 2019 – Jul 2023

* Designed and deployed production-grade infrastructure using Terraform, covering EKS clusters, serverless APIs, and multi-account architectures on both existing contracts and new proposals.
* Managed workloads using EKS, Lambda, API Gateway, S3, Aurora, and Route 53, ensuring uptime across dev, test, and prod environments.
* Defined parameter-driven deployment pipelines using SSM, IAM, and Secrets Manager, enabling secure environment separation and team handoff.
* Integrated Cognito for authentication in multiple applications with complex access control needs.
* Delivered repeatable bootstrapping tools and CI/CD patterns adopted across teams.
* Supported infrastructure under active development pressure, debugging Terraform drift, IAM failures, and rollout issues in real time.

## Earlier Roles – Backend, DevOps, Data Engineering

Examples: Bank of America, Uptake, Finch Computing, Bloomberg Law
2008 – 2019

* At Bank of America, built Prometheus monitoring system and long-term storage backend using HDFS to retain time-series metrics at scale.
* At Uptake, supported predictive analytics for industrial clients with Python-based data pipelines and real-time monitoring.
* At Finch Computing, developed pipelines and services for large-scale data ingestion, transformation, and machine learning. Supported streaming workloads and real-time analytics.
* At Bloomberg Law, rebuilt backend of Bloomberg Law’s legal search platform, migrating from legacy HP Autonomy to Apache Solr for improved relevance, scalability, and maintainability.

# Open Source

strall.com / Adage Infrastructure Studio – Lake Zurich, IL

* Built Adage, a Terraform-based framework for modular, multi-account AWS infrastructure with runtime-aware parameter management and identity-based access controls.
* Developing Karma, a graph backend using Amazon Neptune for infrastructure lineage and dependency tracking across services and environments.
* Both projects are used to prototype and document patterns I’ve developed through real-world cloud infrastructure work.

# Skills

Cloud: AWS (Lambda, Fargate, ECS, EKS, EC2, RDS, Aurora, S3, IAM, SSM, Cognito, CloudFront, Route 53, ACM, API Gateway, SNS, SQS)

Languages: Python, Java, HCL, Bash, SQL

Tools: Terraform, Kubernetes, Jenkins, Ansible, Docker, GitHub Actions, Prometheus, Grafana, Datadog, Splunk

# Education

University of Illinois – B.S., Software Engineering

DePaul University – M.S., Predictive Analytics (incomplete)

Completed all core and advanced courses; 3 courses short of degree