# Ted Strall

# **Professional Summary**

**Cloud Infrastructure Engineer** with a focus on scalable system design, automated deployment pipelines, and secure AWS architecture. Experienced with Terraform, Kubernetes, Jenkins, and modern AWS services including Lambda, API Gateway, Fargate, EKS, IAM, Cognito, and RDS. Support developer workflows with CI/CD, observability, and secure, automated infra. Creator of Adage and Karma, open-source frameworks for modular infrastructure and graph-based system tracking.

# **Experience**

## **Senior Cloud Infrastructure Engineer**

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

- Re-architected the EKS cluster lifecycle using Terraform, improving reliability and consistency across environments.
- Automated ingestion of structured/unstructured logs into Splunk for auditing and debugging distributed ETL pipelines
- Integrated Datadog with AWS infrastructure (Lambda, EC2, RDS) to monitor performance metrics and set up custom alerts for critical services.
- Implemented secrets orchestration via Secrets Manager.
- Enhanced observability with custom Grafana dashboards.
- 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.
- 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.
- Designed and deployed secure VPC architectures with private/public subnets, NAT gateways, and security groups for containerized workloads and managed databases.
- Implemented least-privilege IAM policies for services and developers, enabling scoped access to S3, RDS, and Parameter Store using Terraform.
- 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 realworld 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

Graduate coursework DePaul University - M.S., Predictive Analytics