



LEWA LABS LLC

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Capability Statement

AWS, AI, backend, DevOps, telemetry, and mission-support software

Michigan-based small business | Remote / Hybrid

COMPANY SUMMARY

Lewa Labs LLC is a small technical software business focused on AWS cloud systems, backend engineering, AI implementation, DevOps, telemetry/data pipelines, and aerospace-adjacent mission-support software.

The company serves prime contractors, subcontractors, commercial aerospace teams, government-adjacent programs, and technical leads who need senior engineering judgment with hands-on implementation.

Lewa Labs is a strong fit for focused work packages, architecture reviews, prototypes, modernization efforts, technical rescue work, and subcontracted software delivery where clear communication, reliable execution, and practical architecture matter.

CORE CAPABILITIES

- Cloud architecture and AWS systems: serverless services, APIs, event pipelines, storage, identity, monitoring, cost-aware design, and production support.
- Backend software engineering: production APIs, service integrations, authentication flows, operational tooling, and data-heavy services.
- AI implementation and AI-assisted tooling: LLM-assisted automation, guardrails, evaluation, data preparation, model deployment support, and human-reviewed workflows.
- Telemetry and data pipeline systems: event-driven ingestion, transformation, storage, publishing, and monitoring for mission-adjacent data.
- DevOps and infrastructure as code: CI/CD, AWS account patterns, IAM/SSO, deployment automation, observability, Terraform, CloudFormation, Docker, and Git.
- Aerospace and mission-support software: ground-support tools, cloud-hosted data systems, mission-facing dashboards, R&D software, and technical prototypes.
- Contracting maturity: comfortable with NDAs, subcontract flow-downs, and least-privilege IAM/security practices.

DIFFERENTIATORS

- Founder-led senior engineering - no junior-staff bait-and-switch.
- Direct NASA/aerospace key-personnel background (NASA Ames, VIPER telemetry).
- Patent-backed product delivery (six issued U.S. patents).

IDEAL ENGAGEMENTS

- AWS architecture reviews and modernization planning
- Backend/API implementation and subcontracted software work packages
- Telemetry and event-data pipeline prototypes
- AI tooling for engineering and technical teams
- Cloud migration support, DevOps, CI/CD, and infrastructure automation
- Technical rescue, stabilization, and focused mission-support prototypes

Contracting note

Active SAM.gov registration. UEI: W7Y2PKFB4213. CAGE: 20U42.



PAST PERFORMANCE & KEY PERSONNEL

Entries marked "Founder (key personnel)" reflect work performed by the founder prior to or outside Lewa Labs LLC.

- Founder (key personnel): Senior software engineering at NASA Ames Research Center, including NASA VIPER Moon Rover and aeronautics-related projects.
- Founder (key personnel): Primary engineer for a VIPER telemetry publishing project designed to make rover telemetry public shortly after Deep Space Network receipt.
- Founder (key personnel): AWS production systems using CloudFront, API Gateway, Kinesis, DynamoDB, EC2, Redis, FastAPI, Lambda, S3, RDS, SageMaker, CloudFormation, IAM, OAuth, SSO, and related services.
- Founder is inventor on six issued U.S. patents covering mobile/wearable location and beaconing methods (Wave2Find technology).

TECHNICAL STACK

Languages	Python, Java
Cloud / AWS	Lambda, API Gateway, CloudFront, S3, Kinesis, DynamoDB, EC2, RDS, Route 53, SageMaker, Step Functions, VPC, ACM
Backend	FastAPI, APIs, JWT, OAuth, Boto3, Linux services, service integrations
Data / Messaging	Kinesis, SNS, DynamoDB, RDS, Postgres, MySQL, Redis, ETL/data pipelines
DevOps / IaC	Terraform, CloudFormation, Docker, Git, CodeBuild, CodeDeploy, CloudWatch, IAM, SSO
AI Tools	OpenAI Codex, FastMCP, NotebookLM, SageMaker, LLM workflows, guardrails, evaluation
Aerospace / Telemetry	VIPER telemetry publishing experience, ground-system context, mission data processing, cloud telemetry pipelines

CONTRACTING READINESS

Legal business name	Lewa Labs LLC
Location	Michigan-based small business
Business structure	Limited Liability Company
Work model	Remote / Hybrid
UEI	W7Y2PKFB4213
CAGE code	20U42
SAM.gov status	Active in SAM.gov; CAGE: 20U42
Small business status	Self-certified small business (Michigan-based)
NAICS codes	541511, 541512, 541519, 541330, 541715
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