TEREDA SOFTWARE

Capability Statement ■ Software Engineering ■ AI Integration ■ Legacy Modernization ■ Cybersecurity

UEI	UDSKER5X7EU8	**Size**	Small Business
CAGE	19RN8	**Veteran**	Veteran-Owned
NAICS	541511, 541512, 541513, 541519, 518210	**SAM**	Registered & Active
PSC	DA01, DA10, DC10, DH01, DH10, DJ01	**GPC**	Accepted (Stripe)

COMPANY OVERVIEW

Tereda Software LLC is a veteran-owned small business that architects, builds, and deploys production-grade software systems across a wide range of modern and legacy languages and platforms. From standalone tools to enterprise platforms managing hundreds of interdependent data entities, real-time operations, and multi-party financial transactions. Every project is principal-led — architected and reviewed by senior engineers from first commit to production deployment. A scalable network of vetted specialists is engaged as mission requirements demand. All infrastructure is US-hosted. No offshore development.

CORE CAPABILITIES

- **Enterprise Platform Development** — Multi-tenant platforms with complex relational data models, role-based access control, row-level security, and multi-party workflows. Production systems operating at 290+ table scale.
- **Legacy System Modernization** — End-to-end migration of COBOL, FORTRAN, Ada, MUMPS/M, RPG, PL/I, ColdFusion, VB6, Access databases, and on-premise monoliths to modern cloud-native architectures. Schema translation, parallel-run validation, and phased cutover strategies designed to prevent data loss.
- **AI Engineering & Integration** — AI-powered workflow automation, intelligent document processing, voice transcription, natural language interfaces, and integration of foundation model capabilities into existing enterprise systems via API.
- **Security Architecture & Threat Defense** — AES-256 and field-level encryption, end-to-end encrypted channels, TLS 1.3, zero-trust access patterns, automated threat detection, and real-time intrusion response. Controls mapped to NIST SP 800-171 and NIST SP 800-53.
- **Mobile & Cross-Platform** — Native-quality iOS and Android applications via Flutter, React Native, and native Swift/Kotlin. Offline-capable architectures, biometric authentication, and push notification infrastructure.
- **Financial Systems & Transactions** — Multi-party payment architectures, deposit tracking, automated disbursement engines, subscription billing, invoicing systems, and PCI-compliant transaction flows with full audit trails.
- **Data Engineering & Intelligence** — Relational database architecture at scale, row-level security enforcement, server-side business logic, ETL pipelines, event-driven subscriptions, automated backup and disaster recovery, and data migration tooling for legacy system modernization.
- **Cloud & DevSecOps** — AWS GovCloud, Azure Government, Cloudflare. Edge computing, CDN architecture, CI/CD automation, container orchestration, DDoS mitigation, and security header hardening.
- **Real-Time Communications & Telemetry** — Video conferencing, VoIP telephony, speech-to-text transcription, real-time GPS tracking, geofencing, and encrypted messaging over WebSocket and WebRTC protocols.

Damian K. Tereda | Principal | USMC Veteran | damian@teredasoftware.com | (860) 987-2495 | teredalabs.com

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- **System Integration & API Engineering** — RESTful and real-time API design, third-party system integration, webhook architectures, OAuth/SAML authentication flows, and legacy system bridging.
- **Web Application Development** — Responsive, accessible, high-performance web applications. Section 508 and WCAG 2.0 AA compliant. Server-side rendering, static generation, and CDN-optimized delivery.
- **Workflow Automation & Document Management** — Custom workflow engines, approval chains, document generation, digital signature integration, and records management aligned to federal retention requirements.
- **Spatial Computing & Visualization** — 2D-to-3D sketch conversion, trade-specific symbol libraries, WebGL visualization, and GIS integration for infrastructure inspection and facility modeling.

WHY TEREDA SOFTWARE

- **Defense Industry Pedigree** — 8 years across Northrop Grumman, Lockheed Martin, and PCX Aerosystems supporting FARA/FLRAA, CH-53K King Stallion, VH-92A (presidential rotorcraft), CH-47 Chinook, Apache, and submarine systems (Seawolf, Virginia class). Federal documentation standards, configuration management, and mission-critical operational rigor are familiar ground.
- **Production-Proven Engineering** — Live SaaS platform with 293 production database tables, real-time processing, and automated workflows. Not prototypes or demos — operational systems with real users and real data.
- **Rapid Delivery** — Lean operation with modern tooling delivers 3-5x faster than traditional consulting firms. Cost savings passed directly to government clients.
- **Full-Stack Ownership** — Architecture through deployment, no handoffs, no subcontractor chains. Principal-led with a scalable network of vetted specialist engineers.
- **Low Overhead** — Lean firm structure puts maximum contract dollars into engineering work, not administrative overhead.

TECHNICAL ENVIRONMENT

Languages	TypeScript, Python, Go, Rust, Java, C#, Swift, Kotlin, C/C++, SQL, Dart, COBOL
Frontend	React, Next.js, Flutter, React Native, Tailwind CSS, WebGL
Backend	Node.js, Python, Go, Rust, Ruby on Rails, PostgreSQL, Redis, Elasticsearch
Legacy	COBOL, FORTRAN, Ada, PL/I, MUMPS/M, RPG, JCL, CICS, VSAM, IMS, DB2, PowerBuilder, ColdFusion, VB6, Access
AI	AI-powered automation, NLP interfaces, voice transcription, document processing, foundation model integration via API
Cloud	AWS GovCloud, Azure Government, Cloudflare, Docker, Kubernetes, Terraform
Security	AES-256, TLS 1.3, OAuth/SAML, zero-trust, RLS, RBAC, NIST 800-53/800-171
DevOps	GitHub Actions, CI/CD, Infrastructure-as-Code, automated testing, container orchestration
Payments	Stripe Connect, multi-party payments, deposit tracking, webhook architectures, PCI-compliant flows

COMPLIANCE & STANDARDS

NIST 800-171	Security architecture designed against 800-171 framework. CUI safeguarding capabilities available upon contract requirement.
NIST 800-53	Security and privacy controls mapped across platform infrastructure. Continuous monitoring capabilities.
CMMC 2.0 L2	Architecture designed against CMMC 2.0 Level 2 framework. Prepared for third-party assessment as contract requirements dictate.
Section 508	WCAG 2.0 AA compliant. Keyboard navigation, screen reader compatibility, ARIA implementation, color contrast.

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FedRAMP	Infrastructure deployable on FedRAMP-authorized platforms (AWS GovCloud). FISMA-aligned security documentation.
OWASP Top 10	Secure development practices embedded in every delivery pipeline. Vulnerability scanning and remediation.

PAST PERFORMANCE

Zafto (zafto.app)	Multi-tenant SaaS platform: 293 production database tables, Stripe Connect payment processing, role-based access control, row-level security, real-time collaboration, automated workflow orchestration. Five integrated web portals and Flutter mobile app. Built on PostgreSQL. Live and operational.
Warmia (warmia.org)	Organization management platform: bilingual public website, event coordination, troop management, and donation system serving 9 units across 5 states.
A&D Background (8 yr)	Northrop Grumman, Lockheed Martin, PCX Aerosystems: FARA/FLRAA, CH-53K King Stallion, VH-92A, CH-47 Chinook, Apache, and submarine systems (Seawolf, Virginia class). Systems engineering, software development, federal documentation standards, and configuration management.

IDEAL CONTRACT VEHICLES

- **Micro-purchases (under $15K)** — Rapid assessments, tool builds, legacy program documentation, prototypes
- **Simplified acquisitions ($15K–$250K)** — Platform builds, modernization projects, system integration
- **Subcontracting** — Available as subcontractor to prime contractors on government-wide and agency-specific IDIQs
- **Sources Sought / RFI** — Active respondent building federal engagement across agencies

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