

BYTECIRCUIT, LLC

CAPABILITY STATEMENT



Enterprise Architecture | Hybrid Cloud | AI-Enabled Infrastructure | IT/OT Modernization | Systems Integration

COMPANY OVERVIEW

ByteCircuit, LLC is a boutique technology advisory and enterprise architecture firm helping government, prime contractor, and commercial partners modernize complex systems, reduce technical debt, and build resilient digital infrastructure.

ByteCircuit provides specialized technical leadership across enterprise architecture, hybrid cloud modernization, systems integration, data orchestration, IT/OT ecosystems, network and security-aligned architecture, AI-enabled infrastructure, architecture governance, and platform reliability.

Founded by Kaylaa T. Blackwell, ByteCircuit brings 15+ years of hybrid technology leadership across complex enterprise and infrastructure environments, including smart grid, IoT, cloud strategy, systems engineering, software and data integration, distributed platforms, enterprise data ecosystems, platform modernization, and AI-enabled ecosystems.

CORE COMPETENCIES

Enterprise Architecture & Technology Strategy Current-state and target-state assessments, modernization roadmaps, platform strategy, architecture governance, technical decision support, and security-aligned architecture.

Hybrid Cloud & Infrastructure Modernization Cloud/on-prem integration, distributed infrastructure, platform modernization, edge environments, resilient infrastructure planning, and hybrid operating models.

Systems Integration, Data & Automation Architecture API strategy, enterprise integration, data flow modernization, enterprise data platforms, workflow automation, event-driven architecture, and interoperability.

IT/OT Modernization & Smart Grid Advisory Architecture support bridging operational technology, utility and smart grid ecosystems, IoT, edge environments, and enterprise platforms.

AI Readiness & AI-Enabled Ecosystem Strategy AI readiness assessments, agent-ready architecture, GPU infrastructure strategy, governance guardrails, secure AI workflow planning, and AI-related technical debt review.

Network & Security-Aligned Architecture Secure connectivity, network modernization, access patterns, observability, platform reliability, operational resilience, and security-aligned infrastructure planning.

RELEVANT EXPERIENCE & DIFFERENTIATORS

15+ Years of Hybrid Technology Leadership Enterprise-scale architecture leadership spanning smart grid, IT/OT, cloud, systems integration, enterprise data platforms, network and security architecture, and AI-enabled environments.	Architecture-Led Modernization Modernization decisions grounded in architecture, dependencies, operational risk, interoperability, resilience, and long-term technical value.
Hybrid Technology Depth Experience across cloud and on-prem environments, infrastructure, smart grid, IT/OT, data, integration, networking, security, platform modernization, and emerging AI ecosystems.	Vendor-Neutral Advisory Objective technology evaluation focused on mission outcomes, technical fit, risk reduction, resilience, and operational efficiency.
Strategy-to-Execution Discipline Translation of complex business and technical objectives into clear architecture decisions, engineering roadmaps, requirements, governance models, and implementation-ready guidance.	Lean Senior-Level Support Focused access to experienced architecture leadership that can augment prime, agency, engineering, and modernization teams without unnecessary delivery overhead.

FEDERAL CONTRACTING PROFILE

FEDERAL DATA Legal Business Name: BYTECIRCUIT, LLC UEI: K332THB9V683 CAGE Code: 23EQ1 SAM.gov Registration: Active (All Awards) Business Structure: Single-Member LLC Location: Wake Forest, North Carolina	BUSINESS & SOCIOECONOMIC REPRESENTATIONS (SAM.gov) • Self-Certified Small Disadvantaged Business (SDB) • Women-Owned Small Business (WOSB) • Women-Owned Business • Minority-Owned Business • Black American Owned
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NAICS CODES

NAICS	Service	ByteCircuit Alignment
541511 (Primary)	Custom Computer Programming Services	AI Integration, Data Orchestration and Software Integration
541512	Computer Systems Design Services	Enterprise Architecture, Systems Integration and Modernization
541519	Other Computer Related Services	
541330	Engineering Services	Smart Grid, IT/OT Systems, Infrastructure and Systems Engineering
541611	Administrative Management and General Management Consulting Services	
541990	All Other Professional, Scientific and Technical Services	

PRODUCT SERVICE CODES

PSC Code	Description
DF01	IT and Telecom: IT Management Support Services
DA01	IT and Telecom: Business Application/Application Development Support
R408	Support - Professional: Program Management/Support
R425	Support - Professional: Engineering/Technical

TEAMING & PROGRAM SUPPORT

ByteCircuit is available for prime contracting, subcontracting, teaming, and specialized architecture advisory engagements supporting federal, state/local, public-sector, critical-infrastructure, and regulated modernization initiatives. Relevant support includes enterprise architecture, modernization assessments, hybrid cloud strategy, systems integration, IT/OT advisory, smart grid technology, AI readiness and governance, data orchestration, technical debt assessment, network and security-aligned architecture, proposal solution support, and executive technology strategy.

POINT OF CONTACT

Kaylaa T. Blackwell | Founder, Chief Architect & Principal Technology Strategist
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