Forward Edge-AI Secures U.S. Patent for Fog Computing Cybersecurity System

New edge technology promises secure, resilient communications for military and critical infrastructure networks

SAN ANTONIO, TX, UNITED STATES, July 30, 2025 /EINPresswire.com/ -- Forward Edge-AI, Inc. today announced that the United States Patent and Trademark Office (USPTO) has issued a Notice of Allowance for a groundbreaking new patent titled "Methods, Systems, Apparatuses, and Devices for Facilitating Fog Computing and Providing Resiliency Against Attacks." The breakthrough technology integrates encryption, anomaly detection, and local data processing to protect sensitive edge data—on battlefields, in industry, and beyond.

> "This milestone affirms our leadership in quantum-cybersecurity and delivers a self-healing, zero-trust solution that ensures mission-critical continuity in contested or disconnected environments."
>
> *Eric Adolphe, CEO Forward Edge-AI, Inc.*

Unlike conventional systems, it maintains secure operations through multiple encrypted channels, even during cyberattacks. The innovation brings cloud-grade capabilities to edge Fog Compute Nodes while eliminating reliance on vulnerable protocols.

The new technology enables a transformative leap in edge computing by introducing a secure, decentralized fog architecture purpose-built for environments where traditional cloud access is limited or denied. This innovation establishes a trusted edge cloud—a compact, intelligent node that processes and protects data locally, eliminating reliance on centralized infrastructure. In military operations, this means real-time, encrypted communications and resilient mission systems that continue functioning even in disconnected or degraded network conditions.

For critical infrastructure operators, the quantum-resistant [Fog node](#) also acts as a gateway—safely managing sensor and control data at substations, pipelines, and rail networks without sending it to a distant cloud. In smart cities and healthcare settings, the system enables secure on-site analysis for traffic systems, medical IoT, and emergency response networks—reducing latency, enhancing privacy, and ensuring continuity when connectivity fails.

Engineered with post-quantum encryption and embedded anomaly detection, the system is hardened for the future. Its NSA-collaborated architecture. supports the creation of tamper-

resistant "blobs of fog": autonomous, resilient edge clouds that guard critical data and operations. This innovation positions Forward Edge-AI at the forefront of securing edge-first infrastructure across military, industrial, and civilian domains.

About Forward Edge-AI, Inc.
Forward Edge-AI, Inc. is a fast-growing developer of Artificial Intelligence-based technology solutions focused on public safety, national security, and defense. . Forward Edge-AI's mission is to deliver compelling, mass-market AI solutions at the edge to enhance the safety and security of the free world.

Eric Adolphe
Forward Edge-AI, Inc.
email us here
Visit us on social media:
LinkedIn

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