NORSEMAN
DEFENSE TECHNOLOGIES

Quantum-Resilient Security with Fully Homomorphic Encryption

Fully Homomorphic Encryption (FHE) allows sensitive data to remain encrypted even during computation. With FHE, agencies can analyze highly confidential data at the edge without risking exposure — a necessity for future-ready, zero-trust environments.

Key Capabilities:

Processing encrypted data at the edge without exposing raw data. Sensitive medical or contract data can be analyzed without revealing underlying content.

- **True End-to-End Data Privacy –** Ensures no plaintext exposure at any point in processing.
- **Post-Quantum Secure –** Designed to resist decryption by quantum computing advances.
- **Zero-Trust Compatible –** Enables analytics in shared or multi-tenant environments.
- **Secure Collaboration –** Allows agencies to share encrypted insights without sharing source data.
- **Policy-Compliant by Design –** Supports high-side processing and classified data handling requirements.

Intro to Edge Computing

In today's fast-evolving landscape, the need for real-time data processing and actionable insights at the edge has become a critical priority for mission-critical operations. Odin's Edge, powered by Norseman Defense Technologies, is designed to address these demands by delivering scalable, high-performance computing solutions in ruggedized, portable environments. This solution brings unparalleled flexibility, enabling data-driven decisions at the tactical edge while ensuring robust security and seamless scalability.

Core Capabilities:

- **FHE Libraries and Toolkits –** Support for standards-based libraries (SEAL, HElib, PALISADE).
- **Encrypted AI Inferencing –** Enables model execution on ciphertext input without decryption.
- **Secure Edge Hardware –** Includes TPMs, encrypted storage, and FIPS 140-2 validated components.
- **Multi-Node Coordination –** Supports federated learning and distributed analysis across edge clusters.
- **Data Integrity and Provenance Tracking –** Ensures computational accuracy and audit trails even in encrypted states.

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