NORSEMAN
DEFENSE TECHNOLOGIES

Edge Computing for Faster Medical Imaging Processing

Medical imaging systems generate vast amounts of data that require intensive processing. Traditional cloud-based analysis introduces latency and bandwidth constraints, delaying diagnoses and impacting patient care. Additionally, healthcare facilities must comply with strict data privacy regulations, making cloud dependency a challenge.

CHALLENGES

By leveraging edge computing with high-performance edge infrastructure, healthcare providers can:

> **Process Medical Images Locally:** AI-enabled edge servers perform real-time image analysis without relying on cloud connectivity.

> **Reduce Latency:** On-premise computing accelerates the processing of radiology and pathology images, enabling faster diagnoses and improved treatment plans.

> **Enhance Reliability:** Edge infrastructure ensures continuous operation, even in environments with limited or intermittent internet access.

> **Improve Data Security & Compliance:** Keeping sensitive patient data on-site helps meet HIPAA and other regulatory requirements, reducing exposure to cyber threats.

Real-World Application

A regional hospital implemented edge computing for AI-assisted radiology analysis, reducing MRI scan interpretation times from hours to minutes. By processing images locally, radiologists could detect abnormalities faster, prioritize urgent cases, and improve patient outcomes.

Norseman's Value Added

Norseman Defense Technologies helps healthcare providers select and integrate edge computing solutions tailored to their specific imaging workloads. As a value-added reseller, Norseman provides:

> **Hardware Expertise:** Recommending and supplying edge computing platforms optimized for AI-driven medical imaging.

> **Integration & Deployment:** Ensuring seamless implementation with existing hospital IT infrastructure.

> **Security & Compliance Support:** Assisting with solutions that meet stringent healthcare regulations and cybersecurity requirements.

Deploying edge computing for medical imaging enables faster, more efficient diagnoses while reducing dependence on cloud infrastructure. By processing data locally, hospitals and imaging centers can enhance workflow efficiency, prioritize critical cases, and deliver timely, high-quality patient care.