

Artificial Intelligence/Machine Learning Solutions

Trusted, Human-Centered AI/ML Applications Address Diverse Challenges and Missions



or many government organizations today, embracing AI/ML is imperative because of the considerable benefits it can deliver—from dramatically improving business operations to enhancing missions of critical importance.

ENSCO understands the growing importance of AI/ML in our customers' demanding environments and is leading the way in developing and applying AI/ML to solve unique challenges in detecting and assessing unusual patterns, predicting threats and providing novel and actionable insights.

ENSCO's Human-Centered Approach

ENSCO focuses on empowering customers. By working closely with our customers' expert users and analysts, we understand their missions, data, metrics and the potential operational impacts of AI/ML implementations. This collaboration enables us to develop, tune and improve an AI/ML solutions while providing each customer the understanding and transparency of how data and algorithms work to achieve desired outcomes. Whether using AI/ML to make decisions in real-time or for post-processing analysis, when you work with ENSCO, you remain in control of your mission, even as requirements evolve.

Scientific Understanding of Data

We have a depth and breadth in scientific disciplines that brings unique value for our customers. ENSCO offers a deep level of scientific understanding. ENSCO scientists—physicists, chemists, meteorologists, etc.—and engineers—civil, mechanical, aerospace and electrical—inform the AI through their unique understanding of the phenomenology. They have the technological and scientific fluency to create and apply algorithms, and to develop AI/ML solutions that specifically meet the needs of the customer.

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Recent AI/ML Research and Programs

We work with a broad range of customers, each with varying needs. Programs we have deployed have addressed high-stakes challenges for our customers, including safety, situational awareness and target identification:

ENSCO developed and deployed a deep learning application for 2-D Object Detection for a railway inspection product line that includes machine vision inspection of railways on 2D images collected from moving platforms. The technology detects components in track and defective conditions such as missing or broken components.

ENSCO developed an automated method using machine learning models to identify signals of interest on seismo-acoustic sensors, regardless of the type of signal (e.g., frequency modulation, broadband, impulsive or other signal types). This has significantly reduced the time spent on manually reviewing incoming data streams and allows human review of model outputs.

ENSCO developed a deployable sensor system to automatically detect and classify vehicles according to size in real-time. ENSCO developed a machine learning algorithm and implemented it in a real-time embedded low-power system for persistent monitoring.

AI/ML: Enhancing Your Mission

There is much to explore in the AI/ML universe. With our unique capabilities, scientific understanding of the data, human-centered approach and highly effective training methodology we are an optimal AI/ML partner. Let's discover where we can apply these solutions for you.

Let ENSCO Power Your Business

Core Capabilities

- RF AI Machine Learning
- Deep Learning to 2D Object Detection and Classification
- Patented methodology for presenting image data in a strip chart format



1-800-ENSCO-VA 5400 Port Royal Road Springfield, VA 22151 info@ensco.com www.ensco.com