# Machine Learning and Deep Learning for Mission Applications

Design and deployment of machine learning and deep learning pipelines that transform raw data into actionable predictions, from data engineering through model training, validation, and deployment in secure environments.

**PRACTICE**

**Applied AI and Data**

**CLIENT PROFILE**

DoD or IC organization developing predictive models and classification systems for mission-critical applications such as threat detection, predictive maintenance, or pattern recognition

## Challenge

- Data scientists spending more time on data wrangling than model development
- No standardized ML pipeline for reproducible training, testing, and deployment
- Models developed in research environments that cannot be operationalized in production

## Approach

- Build automated data pipelines for ingestion, cleansing, and feature engineering
- Establish ML platform with experiment tracking, model registry, and version control
- Implement MLOps practices for model validation, deployment, and monitoring in production
- Design model governance framework including bias testing, explainability, and performance monitoring

## Typical Outcomes

- Reduced time from concept to deployed model through standardized ML pipelines
- Reproducible experiments with tracked parameters, data versions, and results
- Production-grade model serving with monitoring and automated retraining triggers

## Procurement Paths

- NASA SEWP V and SEWP VI for GPU compute and ML infrastructure
- GSA MAS for data science and ML engineering services
- CIO-CS (NITAAC) for enterprise analytics platforms

Compare vehicles and ordering steps on **How to buy**.

## Partner Technology Examples

- NVIDIA
- AMD
- AWS GovCloud
- Microsoft Azure

FEATURED PRODUCT

## Odin's Edge: the operated site

**Norseman runs a secure cloud at your site. You run the mission.**

Odin's Edge is Norseman's managed edge platform. It puts compute, storage and network at the site under one controlled architecture, on the hardware you already run, integrated and tested in our lab before it ships. Applications arrive hardened, with the configuration baselines and test reports your security team needs. Norseman operates it around the clock or hands it to your team with the same console. Buy it as one line on your vehicle or as a per site subscription.

**The same site runs the AI when the mission is ready.**

This is a representative use case. To request a briefing or a quote, contact Norseman Defense Technologies at 410.579.8600 or sales@norseman.com.