AI/ML CAPABILITIES

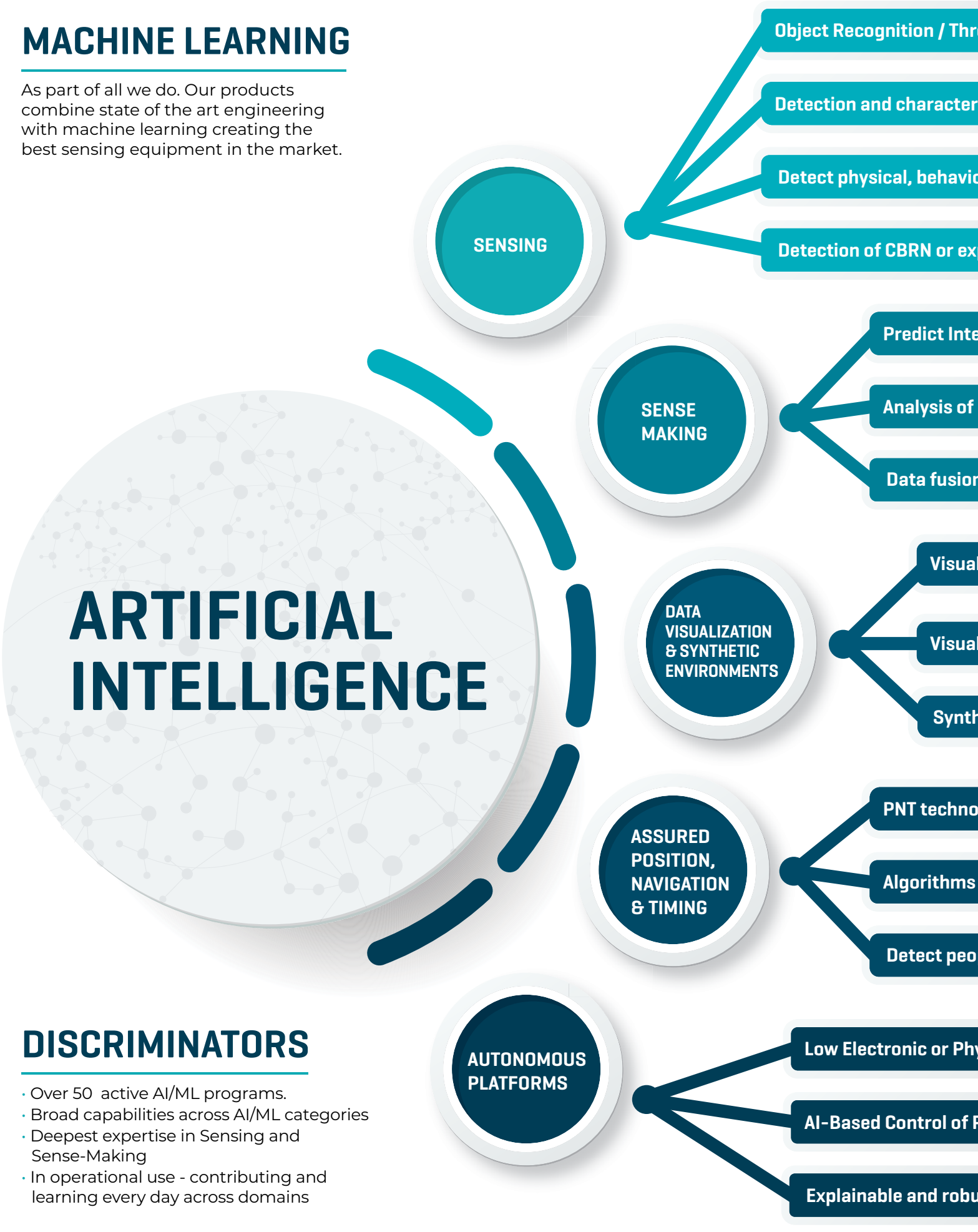
Areté is an advanced science and engineering Employee-Owned Small Business that provides innovative sensing solutions — from scientific discovery through prototyping to production. Areté's smart systems include active and passive sensors, real-time processing, software, and complex algorithms that operate from seafloor to space.

Areté

DISCOVER. DEVELOP. DELIVER.

MACHINE LEARNING

As part of all we do. Our products combine state of the art engineering with machine learning creating the best sensing equipment in the market.



DISCRIMINATORS

- Over 50 active AI/ML programs.
- Broad capabilities across AI/ML categories
- Deepest expertise in Sensing and Sense-Making
- In operational use - contributing and learning every day across domains

eat Warning

ization of obscured targets & terrain obstacles

oral, cyber signatures

plosive threats

ent & Behaviors from large, diverse data sets

adversary signal

n from disparate sources

lization of sensor data and large data sets

lization of complex mulit-source mode data sets

netic environments for virtual-live validation of concepts & prototypes

logies for operations in GPS-degraded or denied areas

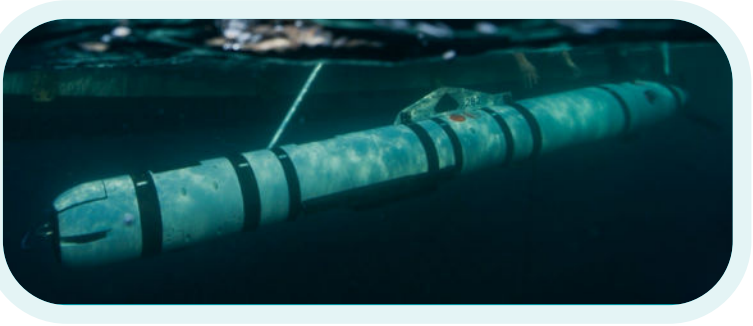
to fuse data from PNT sources

ple, equipment, weapons, or other objects

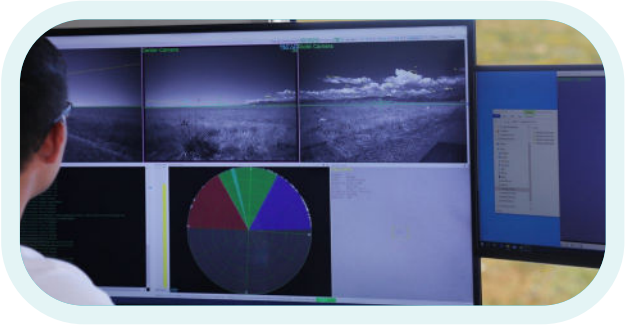
ysical Profiles

Platforms

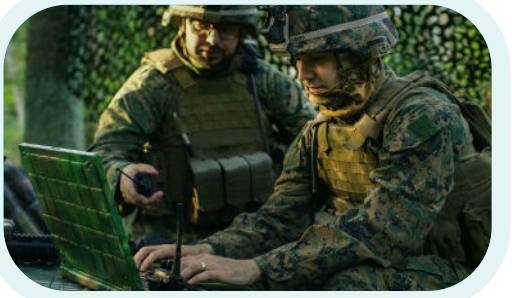
ust AI



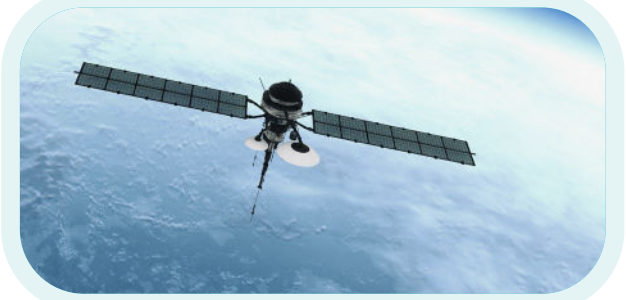
VCM - Video Automated Target Recognition Module



Basilisk - Passive Automated CUAS Sensing



TANDOM - Smart Multi-Sensor Fusion

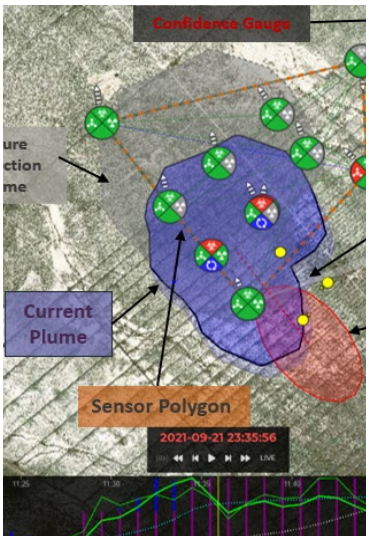


PreVAIL - Automated Target Recognition and Prediction

AIMS - Automated Image-based Monitoring System for Triage

AIMS – Automated Image-based Monitoring System

- **TRL:** 7
- **Production:** Prototyping, integrated into Ascent's Spirit Drone.
- **Discriminators:** Real-time, remote triage, documents injuries from point-of-injury to point-of-care.
- **SWaP:** Software packages on a chip, integrated into any camera – UAV, UAS, fixed site.
- **Status:** SBIR Phase III with U.S. Army TATRC.
- **Description:** Integrated software employing a Deep Neural Network and Computer Vision to remotely locate, characterize, and monitor combat casualties.



TANDOM – Sensor Fusion

- **TRL:** 9
- **Production:** Full Rate.
- **Discriminators:** Sensor Agnostic, Real-Time multi-int sensor fusion for CWMD and Environmental threat mission spaces via standard I/O protocols.
- **SWaP:** TANDOM operates on a range of platforms from low swap processors to cloud installations.
- **Status:** Currently deployed on nine OCONUS locations.
- **Description:** TANDOM is a real-time, tactical software toolkit for enhancing actionable decision making. Providing inputagnostic processing, TANDOM captures inputs from sensors, video, and environmental feeds and converts them to context-based information streams.

LiSA – LIDAR for Situational Awareness

- **TRL:** 9
- **Discriminators:** Low Size, Weight & Power, long range (2Km).
- **SWaP:** 10"x 29.5"x 12", 30lbs, 250W max, normal operation 120W.
- **Status:** Full Rate production, capable of higher rate.
- **Operations:** Currently deployed to Europe on MEDEVAC UH-60s and SOCOM MH-47s and MH-60 Blackhawks.
- **Description:** LiSA is a state-of-the-art LIDAR delivering unparalleled levels of real-time situational awareness, especially in Degraded Visual Environments. LiSA also provides wire-strike/obstacle avoidance, and Landing Zone Assessments, reducing pilot cognitive burden and improving safety in all phases of flight.

Areté

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