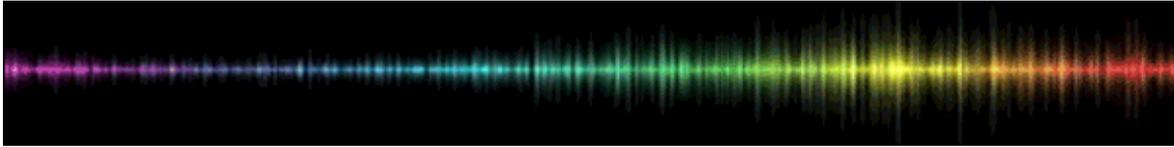




## AUGUST 2018

Military AI brought to you by the editors of [Mil-Embedded.com](http://Mil-Embedded.com) focuses on artificial intelligence technology in the defense and aerospace domain, bringing readers coverage on machine learning, neural networks, and deep learning techniques leveraged in military and aerospace applications.



### Military AI/machine learning speeds decision-making and efficiency for warfighters

JOHN MCHALE, EDITORIAL DIRECTOR

Much of the public thinks of artificial intelligence (AI) and summons images of machines hunting humans or monitoring their every move. Unfortunately, fear and paranoia often accompany tech revolutions - think heavier-than-air flight or commercial drones.

[Read More +](#)



### Artificial intelligence can help warfighters on many fronts

SALLY COLE, SENIOR EDITOR

Bringing artificial intelligence (AI) or "smarts" to the battlefield is already changing the way battles are fought; this technology will become increasingly critical in the future.

[Read More +](#)

### Speeding up DoD acquisition process, military artificial intelligence applications, DoD budget increase

JOHN MCHALE, EDITORIAL DIRECTOR

In this podcast with Mike MacPherson, Vice President, Strategic Planning, Curtiss-Wright Defense Solutions, he discusses the impact for the budget increase on the defense electronics industry and what applications --



radar, unmanned systems, electronic warfare, etc. This podcast is sponsored by the Avionics and Flight Ops show, the premier conference and exhibition for the international avionics and aviation electronics community. For information on attending the event, go to [www.ae-expo.eu](http://www.ae-expo.eu).

[Read More +](#)



## ARL, DCS win machine learning competition

MARIANA IRIARTE, TECHNOLOGY EDITOR

DCS Corp. and the U.S. Army Research Laboratory (ARL) teamed up to participate and win the Neurally Augmented Image Labeling Strategies (NAIS) challenge in Tokyo, an international machine learning research competition.

[Read More +](#)

*Learn how Mercury 3-D innovation is introducing new EW capabilities for smart weapons technology!*



**Download** *"EW & Smart Munitions" white paper*



## Human/AI teaming collaboration coming from ARL, IEEE Brain collaboration

MARIANA IRIARTE, TECHNOLOGY EDITOR

Officials at the Institute of Electrical and Electronics Engineers Brain Initiative (IEEE brain) in conjunction with the U.S. Army Research Laboratory (ARL) are engaging with the scientific community with a newly developed web presence...

[Read More +](#)



## IARPA prize challenge involves fusion algorithms to improve facial recognition

MARIANA IRIARTE, TECHNOLOGY EDITOR

In partnership with National Institute of Standards and Technology (NIST), Intelligence Advanced Research Projects Activity (IARPA) officials launched the Fusion of Face Recognition Algorithms (FOFRA) prize challenge, which aims to improve recognition of face images through fusing the outputs of multiple algorithms applied to the same input imagery.

[Read More +](#)



## SparkCognition to develop AI decision-making technology for USAF, DoD

MARIANA IRIARTE, TECHNOLOGY EDITOR

Cognitive-computing firm SparkCognition has signed a contract with DIUx [Defense Innovation Unit Experimental] to develop Stage 1 of what it calls "Project Quantum" to augment senior-level decisions quantitatively. DIUx is a U.S. Department of Defense (DoD) organization focused on accelerating commercial technologies to the U.S. military.

[Read More +](#)

**WILDSTAR™**  
**OpenVPX**  
**EcoSystem**

High-performance  
signal and data  
processing



## Artificial intelligence & machine learning techniques to be explored in DARPA Causal Exploration program

MARIANA IRIARTE, TECHNOLOGY EDITOR

Defense Advanced Research Projects Agency (DARPA)

officials tapped Raytheon BBN Technologies - a wholly owned subsidiary of Raytheon Co. - to explore artificial intelligence and machine learning techniques to develop tools that may enable military planners to understand how cultural and other factors combine to cause conflicts.

[Read More +](#)



## DoD official: We will deploy advanced algorithms to front lines to decode data before year-end

LISA DAIGLE, ASSISTANT MANAGING EDITOR

The U.S. Department of Defense (DoD) plans to deploy to the front lines new computer algorithms designed to extract objects of interest from massive amounts of moving or still imagery by the end of the year...

[Read More +](#)



MARKETSANDMARKETS

## Analysts project military AI market will reach \$18.82 billion by 2025

LISA DAIGLE, ASSISTANT MANAGING EDITOR

The military market for artificial intelligence (AI) -- valued at \$5.54 billion in 2016 -- is projected to reach \$18.82 billion by 2025, according to a new study published by MarketsandMarkets...

[Read More +](#)

## Benefits of GaN technology for Electronic Warfare and Radar Applications

**Sponsored by:** Mercury Systems, Qorvo

**Date:** September 20, 11:00 a.m. ET

[Register Now](#)



DARPA, Polaris Alpha teaming to develop AI for the battlefield

Technology provider Polaris Alpha has won a \$2.3 million subcontract to help the Defense Advanced Research Projects Agency (DARPA) as the agency seeks to develop new artificial intelligence (AI) tools for fast-changing battlefield environments.

[Read More +](#)



## AFRL awards BlackSky \$16.4 million contract for intel brokering platform

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Spaceflight Industries reports that its BlackSky division has garnered a two-year, \$16.4 million cost-plus-prime contract with the Air Force Research Lab (AFRL) to develop and deliver a cloud-based geospatial intelligence broker platform that will provide on-demand analytics, collection, and...

[Read More +](#)



## NGA awards Janus Geography data management contract

LISA DAIGLE, ASSISTANT MANAGING EDITOR

The National Geospatial-Intelligence Agency (NGA) has awarded a prime contractor position on its 10-year Janus Geography contract to data management and security firm Altamira Technologies (McLean, Virginia).

[Read More +](#)

## High-Performance, Rugged Computing Solutions by X-ES

Utilize X-ES embedded hardware for reliable, trusted computing in a wide range of deployable applications. Designed, manufactured & supported in the USA.



## KeyW enters agreement to purchase Sotera Defense Solutions

MARIANA IRIARTE, TECHNOLOGY EDITOR

KeyW Holding Corp. officials signed a definitive

agreement to acquire Sotera Defense Solutions in an all-cash transaction valued at approximately \$235 million, inclusive of an expected \$46 million net present value of acquired tax benefits.

[Read More +](#)



## SRI International to focus in biological memory in AI applications under DARPA L2M program

MARIANA IRIARTE, TECHNOLOGY EDITOR

Defense Advanced Research Projects Agency (DARPA) officials selected SRI International to develop a next-generation artificial intelligence (AI) system able to learn continuously and apply that learning to become better and more reliable at performing new tasks.

[Read More +](#)



## Analytics at the fore in Lockheed Martin-SAS collab for aircraft programs

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Lockheed Martin has announced a collaboration with data analytics firm SAS that aims to deliver next-generation analytics across Lockheed Martin's F-35, C-130J, and LM-100J military and civil aircraft programs.

[Read More +](#)

**No-compromise performance.**  
*Even at 75°C, the Abaco SBC347D delivers 100% of its rated speed.*

> **LEARN HOW**



**abaco**  
SYSTEMS



Contract extension covers maintenance system development for Navy's MK 99

## FCS

MARIANA IRIARTE, TECHNOLOGY EDITOR

U.S. Navy officials extend a contract with Mikros Systems Corp. to continue to develop to Condition-Based Maintenance (CBM) systems for the Navy's MK 99 Fire Control System (FCS). The follow-on contract is worth \$2.5 million.

[Read More +](#)



## DARPA's Adaptive Radar Countermeasures project moves to Phase 3

MARIANA IRIARTE, TECHNOLOGY EDITOR

Engineers at BAE Systems will move to Phase 3 on the Adaptive Radar Countermeasures (ARC) project for the U.S. Defense Advanced Research Projects Agency (DARPA). The contract modification brings the cumulative value of BAE Systems' ARC contract to \$35.5 million.

[Read More +](#)



## Air Force Research Lab teaming with IBM on advanced neural-network chips

MARIANA IRIARTE, TECHNOLOGY EDITOR

The U.S. Air Force Research Laboratory (AFRL) has announced that it is collaborating with computing giant IBM on a novel brain-inspired supercomputing system powered by a 64-chip array of the IBM TrueNorth Neurosynaptic System.

[Read More +](#)





## AI pact aims to enhance satellite and spacecraft operations

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Aerospace and security company Lockheed Martin and IT/networking company NEC Corp. announced that Lockheed Martin will use NEC's System Invariant Analysis Technology (SIAT) in the space domain.

[Read More +](#)

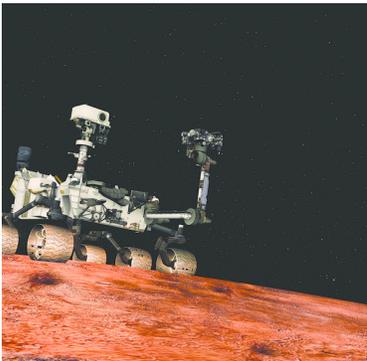


## Autonomous technology headed to the battlefield thanks to U.S. Army, Oshkosh deal

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Oshkosh Defense, an Oshkosh Corporation, has won a \$49 million contract from the U.S. Army Tank Automotive Research, Development, and Engineering Center (TARDEC) to integrate existing palletized load system (PLS) vehicles with scalable autonomous technology as part of the U.S. Army's Expedient Leader Follower (ExLF) program.

[Read More +](#)



## Space missions gaining vision, precision, autonomy

OSSI SAARELA, MATHWORKS

Space missions requiring higher levels of autonomy and greater precision in navigation are becoming increasingly prevalent, and vision-based sensing systems are acting as a technology enabler for these application types.

[Read More +](#)

**ELMA**  
Your Solution Partner

**CMOSS 3U VPX Backplanes**  
For DoD Hardware Convergence

