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Military AI brought to you by the editors of 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.



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AI navigation to aid in naval command decision making

EMMA HELFRICH, ASSOCIATE EDITOR

HRL Laboratories, LLC has launched the Causal Adaptive Decision Aid (CADA) project, which will distill massive data from multiple intelligence sources into a ranked list of recommended courses of action for Naval command center personnel.

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Autonomous UUV introduced by General Dynamics

EMMA HELFRICH, ASSOCIATE EDITOR

General Dynamics Mission Systems released the Bluefin-12 autonomous unmanned underwater vehicle (UUV) at Defense and Security Equipment International (DSEI) 2019.

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AI-powered Agile Condor capability to be demonstrated with MQ-9

EMMA HELFRICH, ASSOCIATE EDITOR

General Atomics Aeronautical Systems, Inc. (GA-ASI) has been awarded a contract from the U.S. Air Force (USAF) to demonstrate the Air Force Research Lab's Agile Condor capability using a MQ-9 Remotely Piloted Aircraft (RPA) owned by GA-ASI.

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British semi-autonomous logistic convoys tested in U.S.

EMMA HELFRICH, ASSOCIATE EDITOR

The U.K.'s Defence Science and Technology Laboratory (Dstl), and the United States Army Combat Capabilities Development Command's Ground Vehicle Systems Center, have hosted an experiment of prototype semi-autonomous logistic convoys with ground and aerial autonomous resupply systems at Camp Grayling Joint Manoeuvre Training Center.

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Intelligent RF communications solution introduced by Perspecta

EMMA HELFRICH, ASSOCIATE EDITOR

Perspecta Inc., announced that its innovative applied research arm, Perspecta Labs, was awarded a prime award from the Consortium Management Group, Inc. (CMG), on behalf of the Consortium for Command, Control, and Communications in Cyberspace (C5) for work on a modular radio frequency (RF) communications solution for the United States Army.

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Rugged XMC from Abaco ideal for ISR and autonomy

EMMA HELFRICH, ASSOCIATE EDITOR

Abaco Systems announced a new rugged XMC graphics and video capture board. The NVP2102 takes advantage of the high performance of the NVIDIA Pascal P2000 GPU with its 768 cores and 4 GBytes of GDDR5 memory to deliver 2.3 TeraFLOPS of performance with support for both CUDA and OpenCL. According to the company, it is the first Abaco video/graphics XMC product to offer high performance input and output.

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TF2, FPGA-based AI computing framework, introduced by Inspur

EMMA HELFRICH, ASSOCIATE EDITOR

Inspur has announced the open-source release of TF2, an FPGA-based efficient AI computing framework. The inference engine of this framework employs the world's



first deep neural network (DNN) shift computing technology, combined with a number of the latest optimization techniques, to achieve FPGA-based high-performance low-latency deployment of universal deep learning models.

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PAC24 autonomous naval surface vessel demonstrated at DSEI

EMMA HELFRICH, ASSOCIATE EDITOR

Britain's next-generation autonomous surface vessel, an inflatable combination of drone and boat, had its first public display at Defence and Security Equipment International (DSEI).

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Terrain-learning robots to be tested by Army

EMMA HELFRICH, ASSOCIATE EDITOR

The U.S. Army Combat Capabilities Development Command's Army Research Laboratory and industry, academic, and government partners are working to provide reliable robot teammates that will have the ability to classify the environment for quality of surface and potential hazards, then maneuver behavior to adjust to conditions.

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WHITE PAPER

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An A/D (Analog-to-Digital) converter, frequently abbreviated as ADC, accepts an analog voltage at the input and produces a digital representation of that voltage at the output that's called a "sample". The two primary characteristics of A/Ds are the rate of conversion or sampling rate, expressed in samples per second, and the accuracy of each digital sample expressed as the number of binary bits or decimal digits per sample.

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