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Earth Day
Tech Summits
#CyberEarth19

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BDPA, formerly known as Black Data Processing Associates, was founded in Philadelphia, Pennsylvania in 1975 to promote professional growth and technical development to those in or entering information and communications technology (ICT) career fields and related industries.

Now in its 43rd year (Volume XLIII) National BDPA (NBDPA) and participating local BDPA Chapters publish daily and weekly blogs with quarterly or monthly newsletters. For bdpatoday or web banner advertising rates, publication schedules, and online calendars with Industry events, contact regional offices or local BDPA Chapters by visiting bdpa.org or bdpatoday.com.

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LEGISLATIVE AFFAIRS — Ron Hamm

WASHINGTON 04.01.19 — The House and Senate are back in session this week. The Senate will continue work on the $13.4 billion FY2019 emergency supplemental appropriations bill, which was passed by the House in January to provide aid to Gulf Coast states hit last year by hurricanes as well as Midwest states that suffered more recent flooding and additional funding for Puerto Rico to recover from the 2017 hurricanes.

This week, President Trump will speak at the White House Prison Reform Summit, trumpeting the enactment of the First Step Act in December 2018, which reformed sentencing guidelines. On Tuesday, he will meet with NATO Secretary General Jens Stoltenberg (this week is NATO’s 70th birthday) and then headline the $2,500-per-plate National Republican Congressional Committee Spring Dinner. On Wednesday, the President will have dinner with senior Pentagon officials, and, on Thursday, he will have an event with the White House Opportunity and Revitalization Council, which was created in December 2018 to direct federal resources to the Opportunity Zone Program and is chaired by HUD Secretary Ben Carson.

Ron Hamm provides federal government relations, strategic counsel, and consulting to education, municipal, and private sector clients with a focus on returning value to the client. Ron applies a collaborative and hands-on approach to client management, providing advice and counsel on issues concerning higher education, research and development (R&D), economic and community development, tax, transportation, broadband, and government marketing. He formulates and executes strategies to secure federal funding, legislation, and regulatory changes that support HCG’s client priorities.

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WASHINGTON—BDPA’s annual Earth Day Tech Summit, #CyberEarth19, was presented in Washington, D.C. by Industry to BDPA Members, Student Members, parents, and regional high school coding competition (HSCC) team leaders (right) during Earth Day weekend.

This year’s tech summit special guest was Dr. DaNa L. Carlis (center) from the Department of Commerce’s National Oceanic and Atmospheric Administration (NOAA).

Dr. Carlis is a meteorologist and mathematician serving as a Program Manager at NOAA’s Office of Weather and Air Quality (OWAQ). During one of the event’s Industry Day sessions, Dr. Carlis highlighted missions of NOAA’s “Hurricane Hunter” aircraft with footage from recent flights.

Dr. Carlis also discussed new platforms and NOAA’s emerging roles for drones and new Geostationary Operational Environmental Satellite (GOES) systems to support meteorological research, capture weather forecasting data, and how supercomputers are used to advance weather modeling and simulations.

Read more—visit bdpatoday.com.

Source: BDPA-DC
Top bdpatoday photo by Evan Carter

#BDPAFuture: NOAA Executive shares exciting tech career opportunities for the planet

‘Class of 2025’ rediscovers NOAA | Above, Dr. DaNa Carlis, Weather Portfolio Manager at NOAA (center), shares recent success stories from NOAA with local high school computer competition teams.

At a Glance:
Funded by NOAA’s Environmental Literacy Program, a small corps of citizen scientists and students took to the streets of Washington, D.C., and Baltimore, Maryland, with temperature sensors mounted on their cars and bicycles. Taking measurements every second, they set out to map their cities’ hottest places.

— Photo credit: NOAA
WASHINGTON, DC—The U.S. Environmental Protection Agency (EPA), the U.S. Department of Agriculture (USDA), and the U.S. Food and Drug Administration (FDA) announced this month the release of a federal inter-agency strategy to address food waste. The agencies held an event at EPA headquarters to hear from state, local and community leaders and other stakeholders on how all levels of government can work together to reduce food waste.

In the U.S., more than one-third of all available food goes uneaten through loss or waste. Food is the single largest type of waste in our daily trash. In recent years, great strides have been made to highlight and mitigate food loss and waste, but the work has just begun. When food is tossed aside, so too are opportunities for economic growth, healthier communities, and environmental protection — but that can change through partnership, leadership, and action. Today’s announcement follows a Presidential Message from President Trump acknowledging the month of April as “Winning on Reducing Food Waste Month” and encouraging public action and participation from all sectors.

The inter-agency strategy, Winning on Reducing Food Waste FY 2019-2020 Federal Inter-agency Strategy, includes six key priority areas the agencies will work together on over the next year:

- Enhance Inter-agency Coordination
- Increase Consumer Education and Outreach Efforts
- Improve Coordination and Guidance on Food Loss and Waste Measurement
- Clarify and Communicate Information on Food Safety, Food Date Labels, and Food Donations
- Collaborate with Private Industry to Reduce Food Loss and Waste Across the Supply Chain
- Encourage Food Waste Reduction by Federal Agencies in their Respective Facilities

This collaborative effort among USDA, EPA, and FDA to reduce food loss and waste through combined and agency-specific action. Individually and collectively, these agencies contribute to the initiative, encourage long-term reductions, and work toward the goal of reducing food loss and waste in the United States.

These actions and collaborative technology requirements include research, community investments, education and outreach, voluntary programs, public-private partnerships, software tool developments, technical assistance, event participation, and policy discussions. Discover more at bdpatoday.com.
Government | Computing

NGA launches $1.2M challenge to advance geomagnetic data collection

Springfield, VA — Headquartered in Springfield, Virginia, the National Geospatial-Intelligence Agency (NGA) is the nation’s primary source of geospatial intelligence, or GEOINT for the Department of Defense and the U.S. Intelligence Community. As a DOD combat support agency and a member of the IC, NGA provides GEOINT, in support of U.S. national security and defense, as well as disaster relief. GEOINT is the exploitation and analysis of imagery and geospatial information that describes, assesses and visually depicts physical features and geographically referenced activities on the Earth.

Last month, the National Geospatial-Intelligence Agency launched MagQuest, a $1.2 million global open innovation challenge. NGA calls upon solvers to submit novel approaches to geomagnetic data collection for the World Magnetic Model (WMM).

Earth is a large magnet, and both digital and analog compasses are oriented by the magnetic force at a user’s location. Since geographic and magnetic poles do not align, geomagnetic models like the WMM correct for this difference. As the Earth’s magnetic field is constantly changing, the difference between geographic and magnetic north also changes, and the WMM must be regularly updated.

The WMM is embedded in thousands of systems, including more than a billion smart phones for mobile navigation apps. The WMM is also critical for military and commercial uses around the world. Among other applications, it supports navigation and attitude determination for submarines, satellites, and aircraft, while also informing operational logistics like the numbering of runways. Beyond navigation, the WMM ensures precise orientation that supports applications in industries as diverse as energy and telecommunications. MagQuest is designed to attract new ideas to increase the efficiency, reliability, and sustainability of geomagnetic data collection. With this challenge, NGA aims to inspire solvers to apply their expertise to spaceborne, aerial, terrestrial, and other potential solution areas. Solvers from small businesses, academic institutions, labs, startups, and other organizations are encouraged to enter the competition.

NGA is working with NASA’s Center of Excellence for Collaborative Innovation and Luminary Labs to produce MagQuest. Visit: https://www.nga.mil/Pages/kids.aspx
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Government Computing: DOE, FEMA, NASA, and NOAA

WASHINGTON—National Oceanic and Atmospheric Administration’s (NOAA) U.S. Spring 2019 outlook, issued last month, nearly two-thirds of the Lower 48 states face an elevated risk for flooding through May, with the potential for major or moderate flooding in 25 states.

GCN reports that in order to help localities better prepare for these emergencies, the federal government, researchers and industry are tapping into new technologies to better understand the scope of climate-related events to alert residents in flood-prone areas ahead of rising waters.

For a longer forecast, NOAA – along with the Federal Emergency Management Agency (FEMA) and the Army Corps of Engineers – offers decision-support services through their “Long Range River Flood Risk” web page.

To improve its weather computer models, NOAA announced it is launching an Earth Prediction Innovation Center where researchers can develop new and emerging model technology that can quickly be transitioned into forecasts at the National Weather Service.

In fiscal year 2020 (FY20) participating BDPA Chapters will feature updates during annual Earth Day Tech Summits. Discover more for 2020 at bdpatoday.com.

MOUNTAIN VIEW, CA—The Department of Energy (DoE) plans to spend $40 million in research funding to develop new algorithms and software for quantum computers so they can be more widely used to tackle a range of scientific problems.

Current quantum computing hardware and architectures vary, and applications are limited. The algorithms and tools that have been developed remain application- and architecture-specific, limiting the potential of quantum computing for science more broadly.

NASA installed a D-Wave quantum computer in 2013 to tackle optimization problems that are difficult or impossible for traditional supercomputers to handle. GCN reports that last year, the space agency’s Quantum Artificial Intelligence Laboratory at Ames Research Center in California signed a contract with Ford Motor Company to help commercial fleet owners optimize energy consumption of vehicles whose efficiency varies with traffic flow patterns and speed changes.

Internships @ NASA | NASA Internships are competitive awards to support educational opportunities that provide unique NASA related research and operational experiences for high school, undergraduate, and graduate students, as well as educators. These opportunities serve students by integrating interns with career professionals emphasizing mentor-directed, degree-related tasks, while contributing to the operation of a NASA facility or the advancement of NASA’s missions. Deadline July 1st. https://intern.nasa.gov/

Save the date: Wednesday, June 19th, 2019 — BDPA Day on “The Hill”

Sources: FEMA and NOAA
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