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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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SUPER COMPUTERS

MILWAUKEE, WI — From the NVIDIA Blog, Bob Sherbin writes that an NVIDIA GPU-powered supercomputer named “Rosie” is at the heart of a new computational science facility at the Milwaukee School of Engineering (MSOE). Unique to MSOE, the supercomputer will be available to undergraduate students, offering them the ability to apply their learning in a hands-on environment to prepare for their careers. Thanks to the university’s corporate partnerships, students will access this high performance computing to solve real-world problems in their course work.

Housed in a glass-walled area within the newly constructed four-story Diercks Hall, the new NVIDIA-powered Ai supercomputer includes three NVIDIA DGX-1 pods, each with eight NVIDIA V100 Tensor Core GPUs, and 20 servers each with four NVIDIA T4 GPUs. The nodes are joined together by Mellanox networking fabric and share 200TB of network-attached storage. Rare among supercomputers in higher education, the system — which provides 8.2 petaflops of deep learning performance — will be used for teaching undergrad classes.

Since their introduction in the 1960’s, the United States has long been the leader in supercomputing career fields. Japan made major strides in this field in the 1980s and 1990s; however, China has become increasingly active in the field. As of November 2018, the fastest supercomputer in the world capable of 200 petaFLOPS is the Summit developed by IBM with the Department of Energy’s Oak Ridge National Laboratory (ORNL).
DENVER, CO — A six-member research team from ETH Zurich was awarded the 2019 ACM Gordon Bell Prize during SC19 for introducing DaCe OMEN, a new framework for simulating the transport of electrical signals through nanoscale materials, such as the silicon atoms used in transistors. The Gordon Bell Prize is awarded each year to recognize outstanding achievement in high-performance computing. The purpose of the award is to track the progress over time of parallel computing, with particular emphasis on rewarding innovation in applying high-performance computing to applications in science, engineering, and large-scale data analytics. Financial support of the $10,000 award is provided by Gordon Bell, a pioneer in high-performance and parallel computing. The two finalists summaries follow.

• “A Data-Centric Approach to Extreme-Scale Ab Initio Dissipative Quantum Transport Simulations.” Technological development means that researchers now have more compute power at their disposal than ever before. For this rapid progress to continue, however, certain technological barriers must be overcome—specifically the soon-to-become unmanageable problem of heat dissipation in compute units. The team, a group of researchers from ETH Zurich, is using Summit to improve the computational efficiency of an ab initio quantum transport solver designed to reveal the coupled electro-thermal properties of atomically resolved nanotransistors.

• “Fast, Scalable, and Accurate Finite-Element Based Ab Initio Calculations Using Mixed Precision Computing.” This study, led by researchers from the University of Michigan, in collaboration with researchers from ORNL and Los Alamos National Laboratory, works with first-principles calculations based on density functional theory in metallic systems. By employing finite-element discretization and mixed-precision strategies, these calculations can be sped up an order of magnitude faster than previous methods. The ability to handle these large-scale metallic systems efficiently benefits numerous application areas, including the design and discovery of new catalytic materials, studies on high entropy alloys, novel energy storage materials, and organometallic complexes in biomolecular electronics. The speedup also means that molecular dynamics simulations can run for timescales longer than what was previously possible.

— Oak Ridge National Laboratory
LEGISLATIVE AFFAIRS — Ron Hamm, contributor to bdpatoday

11.12.19 — The House and Senate return from the Veterans Day federal holiday where the Senate is expected this week to confirm Chad Wolf to his current acting position as Undersecretary of Homeland Security for Strategy, Policy and Plans, which will allow him to be named Acting Secretary of Homeland Security to replace Kevin McAleenan, who resigned October 11, 2019.

The House will take up a bill to reauthorize the Export-Import Bank (EXIM Bank) for the next 10 years (and rename it the U.S. Export Finance Agency). The House is also expected to take up a second Continuing Resolution (CR) to keep the federal government open through December 2019 when the current stopgap measure expires November 21, 2019.

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 and regulatory changes.

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NEW YORK, NY — Recognizing the global impact of technology on all aspects of society and daily life, ACM, the Association for Computing Machinery, has formed a new ACM Technology Policy Council to coordinate the agenda for its policy activities around the globe. With nearly 100,000 members across 190 countries, ACM is the world’s largest association for computing professionals. ACM’s worldwide reach, along with the technical expertise of its members, positions the organization to play an indispensable role in the global technology policy dialogue. The newly-launched council will serve as the central convening point for ACM’s interaction with government organizations, the computing community, and the public in matters of public policy related to information technology and computing.

“The digital revolution is an international phenomenon,” said ACM President Cherri M. Pancake, “and the leading tech companies, whose services are used by billions every day, have facilities and customers in countries all over the world. So the pressing issues we hear about in the media—such as online privacy, data breaches, algorithmic bias, and the future of the Internet—go beyond national borders. ACM’s new Technology Policy Council will provide a space in which computing professionals come together to offer global perspectives on global challenges.”

ACM has been active in the policy arena for more than 25 years. Its US (USTPC) and European (EUTPC) Technology Policy Committees regularly provide nonpartisan technical expertise to policy leaders and government agencies on issues though briefings, testimony, comments, and reports. These committees will now work under the auspices of the new Technology Policy Council.

“The mission of the ACM Technology Policy Council will be to strengthen and elevate ACM’s policy initiatives around the world,” added ACM Technology Policy Council Chair Lorraine Kisselburgh. “Government officials and legislators in nations everywhere are grappling with questions regarding the governance of technology, and the complexity of these technologies demands critical expertise. What ACM brings to the table is a deep bench of technical expertise to better inform policy, both nationally and globally.”

One of the Technology Policy Council’s first initiatives will be to publish a bimonthly series of short technical bulletins that summarize emerging technologies and research, and present nonpartisan perspectives on their policy implications. The ACM Tech Briefs series is intended to inform policy decision makers, the media and the general public.

ACM, the Association for Computing Machinery, is the world’s largest educational and scientific computing society, uniting educators, researchers and professionals to inspire dialogue, share resources and address the field’s challenges. ACM strengthens the computing profession’s collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking. bit

— Source: ACM

ACM Expands Commitment to Evidence-Based Public Policy, Forms Technology Policy Council

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WASHINGTON — This year’s annual Tech & Media Reception, Community Technology Awards, and Holiday Soirée was co-hosted by Samsung Electronics. In closing out this exciting decade, National BDPA’s Washington, D.C. Chapter honored the region’s High School Computer Competition (HSCC) national coding championship team, celebrated the 55th Anniversary of The Washington Informer, and celebrated the 10th Anniversary of the H.O.P.E. Project DMV.

2019 Community Technology Award Winners

2019 Lifetime Achievement Awards
Denise Rolark Barnes, Publisher, The Washington Informer
Larry Irving, Internet Hall of Fame Inductee
Valerie L. Thomas, NASA Inventor and Data Analyst

2019 Industry Sponsor of the Year
Best Buy
Developer + Career Programs

2019 Community Service Award
Eugene W. Grant, Mayor
“Smart City” Mayor of Seat Pleasant, Maryland

2019 Member of the Year
Terry Wilson-Brox, KPMG
Tech ‘Team Mom’ for 2019 National HSCC Coding Champions; Certified Information Systems Security Professional (CISSP) and Certified Information Security Auditor (CISA).

2019 Entrepreneur of the Year
Ron Hamm, President, HCG
Government Relations (GovRel) contributor to bdpatoday

2019 President’s Technical Career Awards
Anu Fomengia
Dernard Hawkins
Lynette Hinton
Sedley Randolph
Phyllis Ussery
Brittany Walker

Since 1975, BDPA’s mission sets continue to pay it forward into its fifth (5G) decade to bridge application development, cybersecurity, information technology (IT), and telecommunications competency gaps between Industry, Academia, governments and traditionally underserved communities.

Local BDPA Chapter goals across the National Capital Region (NCR) are set forth to provide access to technology and career training programs. Events with regional sponsors and mission partners include educational outreach programs for professionals, junior developers (Jr. Devs), young adults, and youth technology programs across the Greater Washington, D.C. metropolitan area (DMV) in direct support of economic development, technology inclusion, and workforce development initiatives.
2019 COMMUNITY Technology Awards

Impact | Nominee | 2019 Category | Connecting the Dots
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Aerospace Industry | VALERIE L. THOMAS | Lifetime Achievement Award | Valerie L. Thomas continued to work for NASA until her retirement in 1995. During that time, she held a number of positions, including Project Manager of the Space Physics Analysis Network and Associate Chief of the Space Science Data Operations Office.

Inventor

Valerie L. Thomas (above) contributed widely to the study of space. She developed computer program designs that supported research on Halley’s Comet, the ozone layer, and satellite technology. She invented a real time illusion transmitter for three dimensional illusions of objects comprising a parabolic mirror to producing real images of illuminated objects. For her achievements, Ms. Thomas received a number of NASA awards including the Goddard Space Flight Center Award of Merit and the NASA Equal Opportunity Medal. Her interests inspires Ms. Thomas to reach out and mentor students through the National Technical Association (NTA) and Science Mathematics Aerospace Research and Technology, Inc. (SMART) throughout the Washington, D.C. area. — bdpatoday photo © 2019 by Roy Lewis
DENISE ROLARK BARNES  Lifetime Achievement Award

In addition to her work at *The Washington Informer*, Denise Rolark Barnes maintains The Washington Informer Charities, a non-profit organization that promotes literacy and sponsors internship opportunities and writing competitions for students interested in pursuing careers in journalism.

Rolark Barnes’ board memberships include EventsDC, the United Black Fund and the Maryland, Delaware, DC Press Association (MDDC), the National Newspaper Publishers Association, the DC Martin Luther King Holiday Commission and the Commission on the 40th Anniversary of Home Rule. She is also a member of Leadership Greater Washington and an inductee into the D.C. Hall of Fame. Rolark Barnes is a graduate of Howard University and Howard University School of Law.

*Dr. Benjamin F. Chavis, Jr.* (left) President of the *National Newspaper Publishers Association (NNPA)*, presents BDPA-DC’s 2019 Lifetime Achievement Award to *Ms. Denise Rolark Barnes*, Publisher of *The Washington Informer* during BDPA’s annual Tech & Media Reception and Community Technology Awards. This year’s annual event was hosted by Samsung Electronics USA in their Executive Briefing Center on Capitol Hill in Washington, D.C. — *BDPA photo © 2019 by Roy Lewis*
H.O.P.E. Project Reaches 10-Year Milestone

WASHINGTON — Founded by Raymond Bell, Jr. in 2009, The H.O.P.E. Project DMV (HOPE) knows all too well and has always recognized an urgent need to upskill local tech workforces since its inception.

Over 25 cohorts later and owning unique relationships with industry trade associations such as CompTIA, HDI, and BDPA, HOPE continues to prepare HOPE students and alumni for advanced pursuits, and certifies cybersecurity professionals for trans-generational sustainment. Moreover, HOPE alumni are industry’s new project managers and hiring managers with new tech pipelines.

Helping Other People Excel—H.O.P.E. During 2019’s **H.O.P.E. IT Summit** in Washington, D.C., annual conference and tech summit attendees met with IT professionals, small business executives, and workshop presenters, some of whom “walked in the same shoes” and recently launched their tech careers with HOPE.

Emerging success stories with industry from local communities hardly ever are deemed newsworthy or become leading stories. HOPE has changed this narrative. This year’s I.T. Summit was an annual value-packed information technology conference with Industry offered at no cost to District Residents, HOPE students and alumni, BDPA Members, and the public. Participants were able to discover new concepts while discussing industry’s requirements with HOPE alumni and Industry panelists. Government contracting with related start-up opportunities, acquiring security and facilities clearances, and pursuing degrees while entering technology fields were shared. 

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