

PEOPLE TO KNOW: TECH INDUSTRY'S BRIGHTEST STARS

# USBE INFORMATION TECHNOLOGY

US BLACK ENGINEER

THE STEM COMMUNITY'S MAGAZINE

\$6.95

## THE TOP 5 VALUES OF A STEM LIFE

Top NetApp exec  
shares his journey

**Thomas Stanley**  
Senior Vice President, Americas  
NetApp

INSIDE:

How GLF is Building  
a STEM Future for 2050

Why NSF Honors BEYA Founders  
with Prestigious Award

What's in an Internship?  
HBCU Grads Tell All



**Chanda Sanders**  
Material and Process Engineer

# YOUR FUTURE IS BUILT HERE

Join a diverse team that is united in pushing the boundaries of imagination and excellence. Come shape the future with us.

[boeing.com/careers](https://boeing.com/careers)      

Boeing is an Equal Opportunity Employer. Employment decisions are made without regard to race, color, religion, national origin, gender, sexual orientation, gender identity, age, physical or mental disability, genetic factors, military/veteran status or other characteristics protected by law.





RAYTHEON PEOPLE

INCLUSIVE.  
INSPIRING.

INNOVATIVE.

Raytheon fosters an inclusive culture that harnesses the power of different ideas and experiences to deliver the innovative solutions our customers depend on.

 [Raytheon.com](https://www.raytheon.com)

 [@Raytheon](https://twitter.com/Raytheon)

 [Raytheon](https://www.linkedin.com/company/raytheon)



**Raytheon**

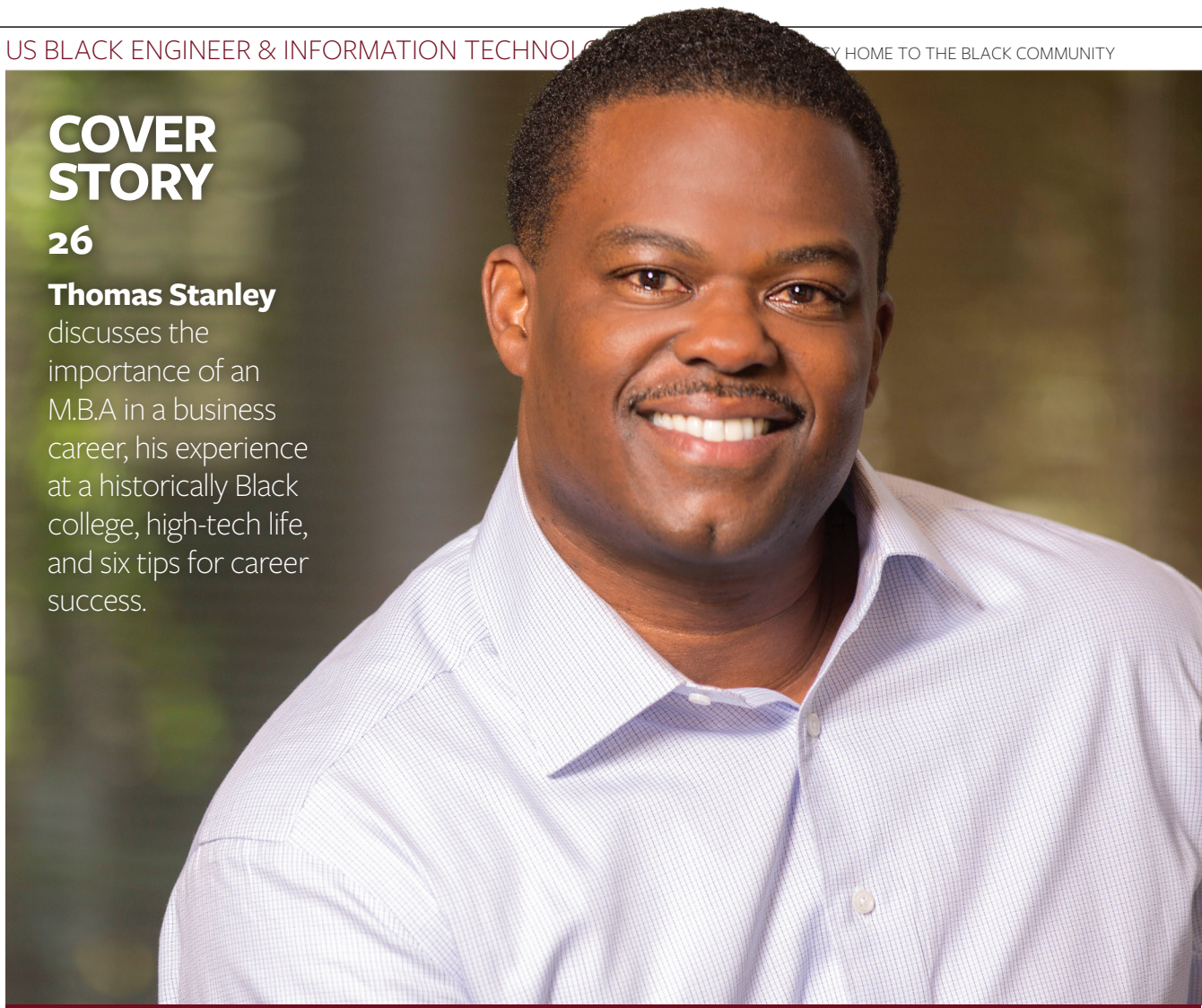


## COVER STORY

26

### Thomas Stanley

discusses the importance of an M.B.A in a business career, his experience at a historically Black college, high-tech life, and six tips for career success.



- 18 **MORGAN ALUMNI FIND SUCCESS:**  
Two Morgan State alumni share their experiences and the impact this HBCU had on their lives.
- 20 **HOW GLF IS BUILDING A STEM FUTURE FOR 2050:**  
A strong foundation is imperative when you are getting started. Kendall Norris, president of the Global Leadership Foundation (GLF), updates us on how GLF is preparing for the future.
- 22 **THE TECH INDUSTRY'S BRIGHTEST SUPERSTARS:**  
20 GLF affiliate members exemplify organizational values.
- 29 **TABORN AND DELOATCH AWARDED NSB HONOR**  
Eugene DeLoatch and Tyrone Taborn were honored for their exemplary service in increasing the public's understanding of science and engineering.



## DEPARTMENTS

**People and Events ..... 6**

Exciting highlights of recent promotions, breaking news on HBCU campuses, and major events happening in the STEM community.

**One on One ..... 8**

Want to find success in Silicon Valley? NetApp's Neil McGowan gives you the blueprint.

**Education .....11**

The nation's oldest black fraternity, Sigma Pi Phi (Gamma Boulé), hopes to support HBCUs into the future.

**First Steps ..... 12**

Young people today are learning the value of interships.

**Corporate Life..... 15**

Let's discuss accepted business behavior and its importance in correspondence.

**Career Voices ..... 17**

Staying true to yourself isn't always easy, especially when you are a young professional. These Northrop Grumman employees share their experiences on their road to success.

**Leading Voices .....34**

- **Viola Thompson** - Managing Stress in Your Daily Life
- **Dr. Denée Thomas Mwendwa** - Retaining Black Females in STEM
- **Erika Jefferson** - Where Are the Black Women in STEM Leadership?
- **Bertina Ceccarelli** - Addressing the Shortage of Women of Color in Tech

**Career Outlook .....43**

- In case you missed it: 2019 BEYA recap
- Top schools attending BEYA
- STEM Directory: These companies are looking for STEM talent

**TIME TO LOOK BACK AND LOOK AHEAD**

From campuses across America, college graduation stories continued to inspire the world. The school year ended with memorable science, technology, engineering, and math (STEM) moments at commencement. Aerial Murphy-Leonard posted a photo online with three Black women who graduated with doctorate degrees in engineering from the University of Michigan. The historic line included Murphy-Leonard, Autumn Jade Bullard, and Ciara Sivels, the first Black woman to earn a Ph.D. in nuclear engineering and radiological sciences at the University of Michigan. In New York, the U.S. Military Academy graduated its largest class of African-American women. This year, there were seven more female Black graduates than in 2018. Next year's graduating class is expected to be larger. At Morehouse College, Robert F. Smith, a chemical engineering graduate from Cornell University and CEO of an equity company focused on software, data, and technology, eliminated the total student loan debt of the Class of 2019. "On behalf of the eight generations of my family that have been in this country, we're gonna put a little fuel in your bus," Smith said. "My path was paved by my parents, grandparents, and generations of African-Americans whose names I will never know," he said. "Their struggles, courage, and progress allowed me to strive and achieve. My story would only be possible in America; it is incumbent on all of us to pay this inheritance forward." Many new college grads have spoken about what it means to be part of this moment in history. If you're looking for some words of wisdom, then look no further than probably the best advice this season: "it is incumbent on all of us to pay this inheritance forward."



Tyrone D. Taborn  
Publisher and Chief Content Officer



29



NOW THE MOST READ BLACK TECHNOLOGY MAGAZINE REACHING OVER 100,000 READERS IN THE UNITED STATES, UK, AND SOUTH AFRICA



# SAVE THE DATE

## FEBRUARY 13-15, 2020

Washington Marriott Wardman Park Hotel • Washington, DC

[www.beya.org](http://www.beya.org)

The 34<sup>th</sup>  
**BEYA**



Global Competitiveness  
Conference



The  
**BEYA**  
EXPERIENCE  
BECOMING  
EVERYTHING  
YOU ARE

For more information, call us at 410-244-7101  
Like us on Facebook: [facebook.com/BEYASTEM](https://facebook.com/BEYASTEM)  
Follow us on Twitter: [@BlackEngineer](https://twitter.com/BlackEngineer)



Watch video

**USBE** INFORMATION  
TECHNOLOGY  
US BLACK ENGINEER

#### EXECUTIVE OFFICE

**Tyrone D. Taborn**, CEO and Chief Content Officer

**Jean Hamilton**, President and CFO

**Alex Venetta**, Associate Publisher, Manager of Partner Services

**Eric Price**, Vice President, Recruitment and Professional Training

#### EDITORIAL AND CONTRIBUTING EDITORS

**Rayondon Kennedy**, Managing Editor

**Lango Deen**, Technology Editor

**Michael Fletcher**, Contributing Editor

**Gale Horton Gay**, Contributing Editor

**Garland L. Thompson**, Contributing Editor

**Roger Witherspoon**, Contributing Editor

#### GRAPHIC DESIGN

**Beverly Wladkowski**, Art Director

**Bryan Davis**, Digital Director

**Rachael DeVore**, Digital Channel Manager

**Joe Weaver**, Global Design Interactive

#### CORPORATE AND ALUMNI RELATIONS

**Dr. Gwendolyn Boyd**, CCG Alumni Committee Chair and President

**Dr. Eugene DeLoatch**, Chairman, BEYA Alumni Group

**Vice Admiral Walter J. Davis**, USN (Ret.) National Chair, BEYA Military Alumni

**Oliver "Bo" Leslie**, (Ret.) Program Manager, Historically Black Colleges and Universities/Minority Institutions, Boeing

**Monica E. Emerson**, Women of Color STEM Conference National Chair

**Matt Bowman**, CCG Military Program Manager, Stars & Stripes Committee; Executive Director/Chief of Staff for VADM Walt Davis, USN (Ret.)

**Ty Taborn**, Corporate Development

#### SALES AND MARKETING

**Gwendolyn Bethea**, Vice President, Corporate Development

**Sheri Hewson**, Account Executive

**Kameron Nelson**, Account Executive

**Jay Albritton**, Social Media Manager

#### JOBMATCH AND STUDENT DEVELOPMENT PROGRAMS

**Ashley Turner**, Recruitment Team Manager

**Courtney Taborn**, Talent Management Specialist

**Rod Carter**, Recruitment Specialist, College Relations

**Shelia Richburg**, College Coordinator

#### CONFERENCE AND EVENTS

**Ana Bertrand**, Conference Coordinator

**Jennifer Roberts**, Customer Success Manager

**Brandon Newby**, Administrative Assistant

**Toni Robinson**, 360 MMG

**Rutherford & Associates**

17304 Preston Rd

Suite 1020

Dallas, TX 75252

#### ADVERTISING SALES OFFICE

Career Communications Group, Inc.

729 E. Pratt Street, Suite 504, Baltimore, MD 21202

Phone: (410) 244-7101 / Fax: (410) 752-1837

*US Black Engineer & Information Technology* (ISSN 1088-3444) is a publication devoted to engineering, science, and technology and to promoting opportunities in those fields. *US Black Engineer & Information Technology* cannot be responsible for unsolicited art or editorial material. This publication is bulk-mailed to colleges and universities nationwide. Subscriptions are \$26/year. Please write to *US Black Engineer & Information Technology*, Subscriptions, 729 E. Pratt St., Suite 504, Baltimore, MD 21202. Copyright © 2019 by Career Communications Group, Inc. All rights reserved. Printed in the U.S.A.



Like us on Facebook:  
[facebook.com/BEYASTEM](https://facebook.com/BEYASTEM)



Follow us on Twitter:  
[@BlackEngineer](https://twitter.com/BlackEngineer)



According to CBcampus.com Survey

# 40%

of hiring  
managers  
would hire  
college interns  
for full-time,  
permanent  
positions.

## Let us help you!

The **CCG JobMatch** internship program connects and places diverse students and recent graduates with **top STEM employers** that offer invaluable work opportunities and experiences.

If you are ready to jump-start your career, visit  
[www.ccgjobmatch.com](http://www.ccgjobmatch.com)





Compiled by Lango Deen  
ldeen@ccgmag.com

## NAVY'S FIRST FEMALE FOUR-STAR ADMIRAL APPOINTED TO IBM'S BOARD



**R**etired Navy Adm. Michelle Howard, who received recognition for her accomplishments during the 2014 BEYA Stars & Stripes Dinner in Washington, D.C., has been appointed to IBM Corporation's board, effective March 1. Howard was the first African-American woman to command a U.S. Navy ship and be promoted to vice admiral. Upon her appointment to the vice chief of naval operations, she was the first African-American woman to serve as an admiral. As vice admiral, Howard was recognized during the ninth BEYA Stars & Stripes Dinner for her trailblazing accomplishments in the Navy.

### New Direction at Howard University's College of Engineering and Architecture

In an email addressed to the Howard University community, Dr. Wayne Frederick, president of Howard University, announced an interim dean had been appointed at the College of Engineering and Architecture. Dr. John M. M. Anderson, a professor at Howard University's Department of Electrical Engineering and Computer Science, will serve as interim dean. According to the email, Achille Messac, Ph.D., current dean of the College of Engineering and Architecture, will be stepping down at the end of the academic year and taking a sabbatical leave from May 13. Following his sabbatical year, Messac will return to the faculty as a professor, Dr. Frederick said in his email.

Anderson earned his Bachelor of Science in electrical engineering from Brown University, his Master of Science from Georgia Institute of Technology, and his doctorate in electrical engineering from the University of Virginia. Before joining Howard University, he served on the faculty of

the University of Florida and as a visiting professor at the University of Maryland. He has also served as an associate editor for the Institute for Electrical and Electronics Engineers Signal Processing Letters. Also, Anderson served as a health science administrator for the National Institute for Biomedical Imaging and Bioengineering at the National Institutes of Health.

### Events

The first-ever **BEYA Virtual Career Fair** was held March 20. "I attended my first BEYA Virtual Career Fair," wrote one attendee. "I got a lot of leads; applied for jobs on sites that I wouldn't have before. I will attend the BEYA Virtual Career Fair again." ■



**Top: Retired Navy Adm. Michelle Howard**

**Bottom: Dr. John M.M. Anderson, interim dean, College of Engineering and architecture, Howard University**

# SAVE THE DATE

### AMIE ANNUAL CONFERENCE September 3-5

Newport News Marriott at Center City, Newport News, VA

### WOMEN OF COLOR STEM CONFERENCE

**October 3-5**

Detroit Marriott at the Renaissance Center, Detroit, MI

### BEYA STEM GLOBAL COMPETITIVENESS CONFERENCE

**February 13-15, 2020**

Washington Marriott Wardman Park, Washington, D.C.



# DO YOUR BEST WORK EVER.

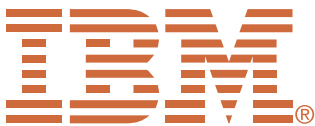
Leslieanne  
Joined IBM 2016

At IBM, we believe every individual brings unique skills, perspective and experience to the workplace. We believe that innovation comes from seeking out and embracing diversity in all its dimensions. Consciously building inclusive teams and encouraging diversity of ideas helps us make the greatest impact for our clients, our colleagues and the world. Diversity of thought. Diversity of colleagues. Do your best work ever.

[ibm.com/inclusion](https://ibm.com/inclusion)

#inclusiveibm

**IBM is proud to be a Top Supporter  
of HBCUs for 14 consecutive years!**



@IBMCareersNA



@IBMNAjobs



by Lango Deen  
ldeen@ccgmag.com

## SO YOU WANT TO BE SUCCESSFUL IN THE TECH INDUSTRY?

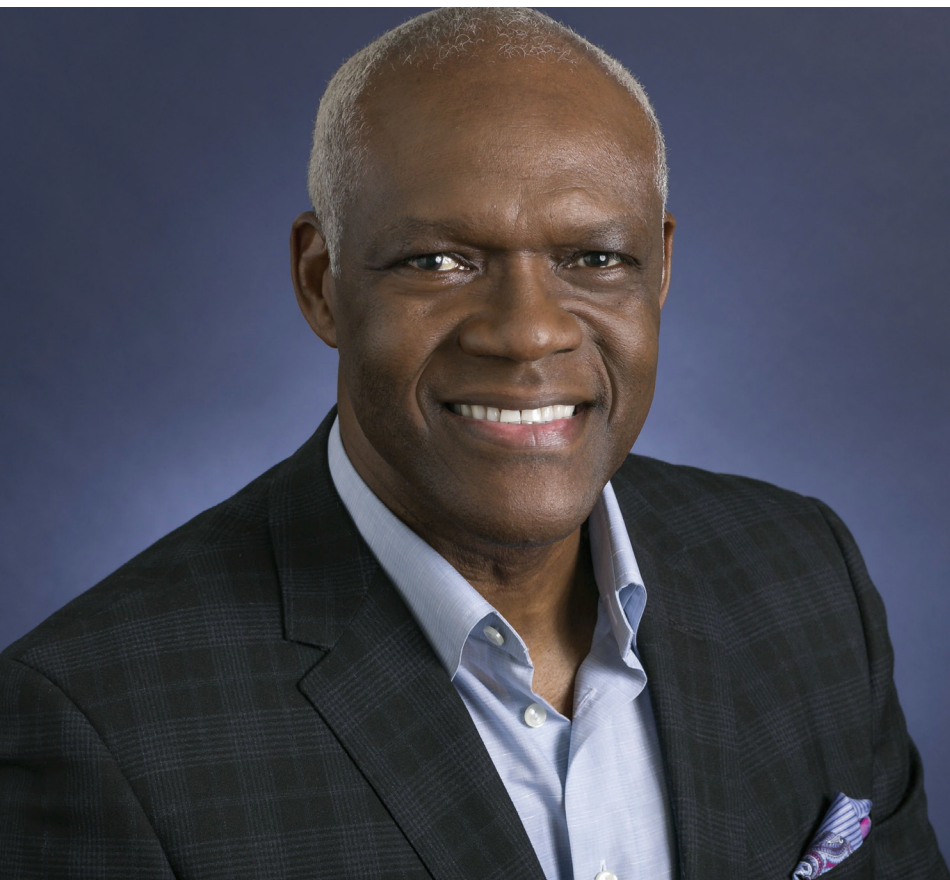
NetApp's vice president of sales tells you how

Neil McGowan drives revenue with NetApp technologies into the top 50 headquarter accounts in the United States. These range from banks to life science companies to tech companies.

In so doing, he must facilitate transactions with companies that service their own needs, and at the same time, address the needs of NetApp, which created the world's first networked storage appliance.

NetApp builds software and hardware, data storage, and data infrastructure systems that enable its customers to store, organize, access, retrieve, and share information. NetApp technology used by their customers and partners helps their businesses transform to meet the demands of B2B. Those demands include getting their applications and services to their customers through data centers onsite at the customer and in the cloud.

"These transactions are complicated and require everything from legal powers to accounting powers to financial powers to engineering technology powers," McGowan said. "My role is to make sure I have a vantage understanding of the entire business that NetApp conducts and how different functions relate to each other and mean to transactions



**Neil G. McGowan**  
**Vice President of Sales for Americas Global Accounts at NetApp**

that I put into play."

As a Silicon Valley veteran, McGowan says it is important for young and upwardly mobile professionals to understand the industry and not just the technical side of the business.

"Often, I find kids coming out of college are not sure what they want to do," he said. "The tech industry is more than just engineers; it's marketing, it's sales, it's accounting, it's finance. Whatever your interest, the technology field has a place for you."

McGowan also said community colleges have wonderful programs that train people just as effectively as any four-year institution, enabling them to qualify for four-year institutions in a much more affordable way.

"There's so much demand for talent that universities cannot produce all the talent that we need," he said.

According to McGowan, two attributes ensure success in an ever-changing industry. You don't have to come to the door with all the knowledge in the world, he explained. However, "it's a people



According to McGowan, **two attributes ensure success** in an ever-changing industry. You don't have to come to the door with all the knowledge in the world, he explained. However, **“it's a people business in a big way, so a positive attitude is needed.** Lots of things get done with teams, so **an ability to work with others is key. Attitude and aptitude** are qualities **valued highly** in the sector.”

business in a big way, so a positive attitude is needed. Lots of things get done with teams, so an ability to work with others is key. Attitude and aptitude are qualities valued highly in the sector.”

McGowan got his start after some advice from a professor. As a student, McGowan's goal was to get a job as fast as he could to generate income. Soon he started taking technology classes and graduated with a computer science degree. He got his first job as a systems analyst working for a tech company supporting customers in the Wall Street area.

“I spent my formative years working with banks and brokerage firms, providing our technology for them, and supporting the technology that we sold to them,” he said. “Over the years, I got a taste for the selling side of the business, but I was more active in being a technical person.”

McGowan's career went from product marketing to support technical instructor, and ultimately, sales. NetApp educates and trains its workforce through its NetApp University.

“We train everyone through classroom training and online courses,” he said. “NetApp also trains our partners and customers. Also, we have an annual boot camp. For example, I did a camp at the Research Triangle in North Carolina to help folks learn more about the industry. We focused simulations on finance, life sciences, business, retail, energy, and manufacturing.”

McGowan says individuals preparing to work in the tech industry need to understand what technology is and does. “So, if somebody says storage, understand what that means. If someone says network, understand what that means. If someone says computer, understand what that means,” he explains.

“The industry is about three things: network, storage, and computing. Companies are taking those core technologies and applying them to different types of solutions for themselves and their customers,” McGowan adds.

Each year, NetApp hires people via its sales and engineering track. “We also have internships for college sophomores through seniors, and we hire on our website,” he said. For all those aspiring to work in the tech industry, McGowan has two important tips:

“Learn as much as you can: Whether it's technical pieces of information or business pieces of information. Technology is a thinking person's game. Things are changing so fast that anything you knew yesterday may not be true today.”

“Be curious: Keep questioning what you know. You don't know where you're going to end up. I'm learning things as a general manager. So be prepared for things you end up liking, which may be different from the early part of your career path. You can only stay on that path if you're prepared.” ■



Read More

To view this story and others like it, visit us online!

<https://www.blackengineer.com/article/so-you-want-to-be-successful-in-the-tech-industry/>





How Many Minority Engineers  
Work For Your Company?

About 12% of the U.S. population is African American,  
yet just over 5% of engineering professionals are African American.  
How will you achieve diversity in this critical profession?

**ASK ABOUT AMIE.**

**AMIE**   
PLANT THE SEEDS OF GREATNESS

PLANT THE SEEDS OF GREATNESS.  
GROW AN AMIE PARTNERSHIP.

**443-885-3077**

e-mail: [amie@eng.morgan.edu](mailto:amie@eng.morgan.edu)  
[www.amie.ws](http://www.amie.ws)



## GAMMA BOULÉ: NO LONGER IN THE SHADOWS

The oldest African-American fraternity now stands front and center!

Once shrouded in secrecy, Sigma Pi Phi is now vocal and visible about its goals to support and advance African-American youth, help HBCUs thrive, and be a social activism leader.

The fraternity, which proclaims itself as the oldest African-American Greek letter association, was founded in 1904 in Philadelphia by a dentist and four physicians. Today, the group is 5,100 members strong.

“We are the premier African-American male organization dedicated to the uplift of our community and our people,” said the group’s leader, Gregory Vincent.

Sigma Pi Phi supports HBCUs by advocating for increased funding, including philanthropic giving and supporting using best practices initiatives.

The association has a language of its own. Members are called archons, chapters are referred to as boulés, and its top leader is known as grandsire archon.

According to Vincent, the frat’s grandsire archon, it’s imperative that Sigma Pi Phi help young people have promising futures.

“We want to make sure we are present and giving them the support they need,” said Vincent. He noted that the fraternity gives an estimated \$1 million

**“It’s imperative that Sigma Pi Phi help young people have promising futures.”**

*Gregory Vincent*

in scholarships to students annually and has been actively involved in mentorship. During President Barack Obama’s administration, Sigma Pi Phi was involved in his administration’s My Brother’s Keeper mentoring program, he said.

In 1980, Sigma Pi Phi, whose membership is by invitation only, established the Boule Foundation and became more public with its mission and goals, although it still tries to be “discreet” in its efforts, operating without much fanfare, according to Vincent. Among the organization’s current goals are scholarship, education, and social activism. It also has initiatives in place to increase the number of African-Americans attending medical school with the intent of boosting the number of physicians of color in the country.

Finding a cure for sickle cell anemia is another of the group’s goals, and it has partnered with St. Jude in this effort.

Sigma Pi Phi’s social activism ranges from working with the Legal Defense Fund to advocate for voting rights to working with legislators on criminal justice reform, said Vincent.

“We have to fight voter suppression efforts from foreign adversaries,” he said.

Vincent, a retired vice president and law professor who’s halfway through his two-year term, said his job entails traveling across the country spreading the word about the fraternity, seeking partnerships, and raising money. He’s constantly on the road—he has attended 100 events during his tenure—and is working to raise \$50 million for the organization.

The fraternity is also focused on African-American culture. Sigma Pi Phi is a founding donor to the Smithsonian National Museum of African-American History and Culture, having given \$1 million to the institution.



**Gregory Vincent, Sigma Pi Phi**

“We have to preserve and protect our culture,” said Vincent.

Sigma Pi Phi has given \$1 million in grants to 30 other organizations, according to Vincent.

The fraternity seeks to build bridges internationally as well.

“We are increasingly working to connect brothers and sisters across the diaspora,” he said, noting that the group will be involved in events recognizing the 400th anniversary of the slave trade, and members plan to travel to Ghana, South Africa, and Haiti.

Vincent said the country’s current political climate has “sharpened our vision and resolve” and serves “as a wake-up call. We have to act. We have no choice but to react and act.” ■



## WHAT'S IN AN INTERNSHIP? HBCU grads tell all

**T**he value of internships is not lost on many young people today. Not only are they embracing internships, but some are racking up an array of experiences from interning summer after summer, and even signing up for part-time internships during the academic year.

### Bryceden Jones

Bryceden Jones graduated this spring from Tuskegee University with a bachelor's degree in mechanical engineering. The 2019 BEYA Student-Athlete award winner plans to attend Clemson University this fall majoring in city and regional planning.

This summer, he interned at Pratt & Whitney in Columbus, GA as an engine center intern.

"This is my third internship: my first being in 2017 at FPL/NextEra Energy in Miami, FL, as a service planner. I executed mechanical engineering-related activities on service planning systems and components to support normal operation and enhancement overhauls to maintain reliability, operational goals, and regulatory requirements."

"In 2018, I returned to the same company, but in a different Florida location as a Distribution Control Center intern."

The 21-year-old has positive things to say about interning.

"Internships are valuable to me in the sense that it provides continuous opportunities to learn and grow," said Jones via email. "What better way to master your craft and also use what you are learning in college than a real-time company experience?"

Jones found his latest internship in a somewhat untraditional way.

"Originally, I was searching for full-time [employment] considering I was

graduating. When I didn't get the desired offer, I decided to attend grad school, so I had to change my option pool to that of internships," said Jones. "Being so late in the recruitment process, most jobs were filled; so, I checked indeed.com and other company sites seeking recent job posting and applied to whatever I could and eventually was blessed to receive a response after less than a week."

### Niana Celestine

Grambling State University student Niana Celestine completed her fourth internship during summer 2019.

As part of a research team at Grambling, she collaborated with the Cyber Innovation Center and National Integrated Cyber Education Research Center to help bring STEM—particularly cyber and computer science—curricula and professional development to K-12 educators.

"As a researcher, I help develop the modules that the educators will then go out and teach younger students with interest in technology," said Celestine via email. "With cybersecurity being the main focus, I pull together the concepts from cryptography, penetration testing, social engineering, and other current topics, and translate them into the material that countless students will be exposed to."

Celestine, who expects to graduate this fall with dual bachelor's degrees in computer science and marketing, had three internships before this one with telecommunications company CenturyLink, headquartered in Monroe, LA.

"There, I was part of the internal communications team, where I worked on the planning and design of the company's intranet, particularly the migration of content from legacy platforms to the new intranet site

after the acquisition of former telecommunications company, Level 3," she said.

Celestine says perhaps the project she is most proud of was the initial idea and groundwork for an augmented reality training app for technicians as part of CenturyLink Disrupt competition, which was later adopted by the product development and technology team.

The 2019 BEYA Student academic award winner said internships are invaluable in many ways such as better defining a student's career path, boosting self-confidence, breathing life into classroom concepts, and relationship building.

"From a personal development perspective, internship experience can boost students' self-confidence in their ability to do the work and reignite their passion for their particular area of study," shared Celestine. "It was after the first internship that I became more active around campus—taking part and emerging victorious in a number of competitions, conferences, and speaking engagements at my school and around the nation. The skills and knowledge acquired from working in industry can provide considerable advantages over the competition when applying to full-time roles, scholarships, or other exciting opportunities."

Celestine started her initial internship search online by applying through CenturyLink's website. She got a call back from a recruiter, followed by a hiring manager, and within two months, she received an offer via email. Celestine credits the relationships she built within CenturyLink and her hard work with positioning her to be brought back year after year.

"I feel blessed to have landed the initial internship at CenturyLink on my first try," said Celestine, who hopes to secure a program manager or software





Pictured left to right: Bryceden Jones, Niana Celestine, and Myles Moore

**“Internships are extremely valuable** because they give you **real-world experience** on applying what you learned in the classroom,” said Moore via email. “An internship helps you to **determine which part of your field you enjoy the most.**”

*Myles Moore*

engineer position after graduation. “Thousands of applications pour into CenturyLink for these summer spots every year, and I felt so honored to be sought out by my hiring managers and team after my first internship.”

### **Myles Moore**

For the first time in three years, Myles Moore, 23, did something different than interning this summer. The spring 2019 graduate from Alabama A&M University, where he earned a bachelor’s degree in mechanical engineering with a concentration in propulsion systems and a minor in mathematics, began graduate studies in sustainable energy and transportation at the University of California, Irvine.

“Internships are extremely valuable because they give you real-world experience on applying what you learned in the classroom,” said Moore via email. “An internship helps you to determine which part of your field you enjoy the most.”

He knows what he’s talking about having spent summers interning at the U.S. Naval Research Laboratory

in 2016, Brookhaven National Lab in 2017, and NASA research facility in 2018. He worked on such projects as designing and fabricating a magnetic coupling tester at NASA and simulations to determine a better test method for determining boiler efficiency at Brookhaven. During his first internship at the naval lab, he performed experiments to determine an efficient and repeatable heating profile for use in ion thrusters.

Moore’s career goal is to be a researcher and work on clean, sustainable energy.

“I obtained my internships through the network I built at Alabama A&M University,” said the 2019 BEYA Student Research Award winner. “Through a good work ethic and maintaining a strong relationship with my professors, they referred me to these opportunities.

“I would always advise someone to get an internship. It builds your network and allows you to gain great experience.” ■





A Multicultural Event

# WOC



**#STEMisagirlthing**



Watch video

# SAVE THE DATE

OCTOBER 3–5, 2019  
DETROIT, MI

[www.womenofcolor.net](http://www.womenofcolor.net)



Like us on Facebook:  
[www.facebook.com/WOCITC](https://www.facebook.com/WOCITC)



Follow us on Twitter:  
[twitter.com/wocotechnology](https://twitter.com/wocotechnology)

Career Communications Group, Inc.  
729 East Pratt St., Suite 504 | Baltimore, MD 21202  
(410) 244-7101 | [www.womenofcolor.net](http://www.womenofcolor.net)

# UNDERSTANDING ETIQUETTE IS KEY TO SUCCESS

## Best Practices in Business Etiquette

**A**t a recent BEYA STEM Conference, two business etiquette experts offered some advice on professional interactions. They discussed why understanding corporate social conventions is such a valuable skill and provided some tips on handling work-related interactions the right way.

### The Importance of Business Etiquette

“When you go into an organization, there are some basic rules that people expect you to follow,” says Talia Fox, CEO of KUSI Global Inc., a corporate leadership development firm. “You have to know your technical stuff, but you also have to understand etiquette. If I see that you can follow the rules, I know I can trust you.”

It’s for this reason, Fox explains, that leaders and managers place such a high value on business etiquette. After all, they need to be confident that their employees will act as strong representatives for the company.

“If I feel you don’t know the rules, it makes me feel uneasy,” she says. “I can’t be sure that you’ll know how to handle the situation when I send you into a meeting.”

According to Fox, practicing basic etiquette is as easy as making eye contact, shaking hands, and showing interest in the people you converse with. These simple actions can make everyone around you, from interns to executives, feel safe and respected.

She makes it clear, however, that you don’t have to treat conversations like an assembly line. “Once you’ve mastered manners,” she says, “then you can add some authenticity and personality in there. That’s very important.”

### Building Relationships in the Workplace

In many cases, it’s those with the best business etiquette who find themselves at the executive table before their peers. Andre Thornton, founder and CEO of Whitman Consulting, and Fox’s interlocutor in the panel, explains that basic etiquette and strong relationships can go a long way in a career.

While some people live by the phrases “It’s not what you know; it’s who you know” or “It’s not who you know; it’s who knows you,” Thornton dismisses them both.

“It’s neither of them,” he says. “It’s who’s willing to help you? You have to build connections with people who like you, respect you, and want to help you,” he says. “That’s how people skyrocket and do incredible things in life.”

In Thornton’s opinion, professional interactions are an opportunity to show people around you that you’re passionate about your field and the company and that you care deeply about the task at hand. Using conversations to ask questions, learning from more experienced co-workers, and offering help wherever possible is a great way to form solid bonds.

### Business Etiquette for Introverts

Often, conversations around etiquette come across as being tailored for extroverted people. It’s much easier for some individuals to walk into a room and start chatting with the first person they bump into. Introverts might feel as if they’re acting inauthentically by trying to keep up.

However, both Fox and Thornton emphasize that even the shyest people can thrive in professional social settings.



**Talia Fox, CEO, KUSI Global Inc.**

“Don’t confuse authenticity with skill,” says Fox. “Who you are is what you believe and how you treat people. Skills are what you learn to be effective in your job. Some people get those things confused.”

For shy, self-conscious people, she offers a few pieces of key advice: When talking to people, focus more on what they’re saying than how you’ll respond. By turning the focus away from yourself, you’ll have more authentic conversations and form stronger relationships. ■



# Calling all employers

Are you an employer  
looking for great ways  
to share your company's  
new job opportunities  
for an incredible career  
in STEM?



**Let us help you!**

Post job openings  
Connect with qualified  
candidates  
Become a featured employer

If you are ready, visit  
[www.ccgjobmatch.com](http://www.ccgjobmatch.com)

CCG  
**JOBMatch**

PLACING STEM INTERNS AND PROFESSIONALS



## 5 YOUNG LEADERS SHARE THEIR SECRETS FOR SUCCESS

At the BEYA Conference, Northrop Grumman Corporation showcased young, Black members of their team. These rising stars gave some insight into what it's like to work for the aerospace and defense technology company and discussed how they achieved success by staying true to who they are.

### Lakisha Platenburg

*CDC Project Manager*

Lakisha Platenburg's interest in computer science started the first time she touched a computer. Since then, she's gone on to lead a team that develops software applications for the Centers for Disease Control and Prevention (CDC), a Northrop Grumman client. She also advocates for women and African-American employees as a board member in two employee resource groups.

"I'm one of the few people I know who truly enjoy their job every single day," she says.

### Dr. Arik Brown

*Consulting Systems Architect*

Throughout his 19-year career, Dr. Arik Brown has worked in a variety of roles. Initially a principal engineer, he's supported projects ranging from radar and electronic warfare applications to ground systems and air support programs.

"I was the only Black male in my graduate research group," he says. "I saw that all of my professors were white and said, 'You know what? I can do that, even though I'm not white.' That pretty much fueled me."

Offering advice to audience members on how to succeed, Dr. Brown says, "A lot of people know that they're talented but are afraid to do big things. Everyone can be great, but you have to be fearless."



Northrop Grumman team members at the 2019 BEYA STEM Conference

### Akeem Anthony

*Software Development Analyst*

It makes sense that Akeem Anthony would end up in the software development field, considering that he's been breaking things and putting them back together since his childhood.

"My mom wasn't always happy with my interests," he says, smiling. "There were a lot of things that worked when I took them apart and didn't work afterward."

Over time, he got better at fixing things and managed to turn his interests into a career in application infrastructure. As a volunteer, he's worked with BEST Robotics.

"When I do community service, I want it to impact someone's life," he says. "As I'm driving home, I want to feel like something changed."

### Dr. Kim Cross

*Manager of Survivability Systems Engineer*

Dr. Kim Cross aspired to become a physician, attending college on a basketball scholarship. However, when a knee injury left her sidelined, she was forced to reevaluate.

It was an internship at the Lawrence Livermore National Laboratory that

introduced her to chemical engineering. From there, she began a long journey toward her career in Northrop's Aerospace Systems Department.

"The Black community as a whole helped me through it," she says with a sense of gratitude. "Talk to your family and find a support network to help you."

### Anwar Kittrell

*Senior Principal Systems Engineer*

Anwar Kittrell supports Northrop's advanced processing capabilities as a lead systems engineer.

Throughout his 10-year career, Kittrell says he's often been the only Black person at the table. However, he makes it clear that this has never affected the way he performs his job. "We're all in the same room and have the same vision," he says, explaining his philosophy to the audience. "Just know that you belong and be prepared to compete."

To those who might feel out of place in their work environment, Kittrell offers a key piece of insight: "Show up and perform. Performance has no gender, no age, and no race." ■



# MORGAN ALUMNI

Twenty years ago, **Aknesha Miller Baruti**, currently general manager for F-35 avionics and electronic systems at Harris Corporation, was a young teenager trying to pursue an industrial engineering degree. She had only recently settled into college life at Morgan State University, which she turned to for a fast-track fall enrollment after her grandfather fell ill. Originally bound for Virginia Tech, Baruti scrambled to find a college within driving distance of her grandparents' home in Jessup, MD.

"I wanted to pursue industrial engineering, but, with my grandfather sick, I needed to be close to my grandparents, who raised me," she said. "It was already August, but Morgan State took my calls, heard my story, and made sure I attended a college that fall."

Now one of the top executives at Harris Corporation, which delivers innovative solutions through a diverse network of communication, electronic, and space systems, Baruti said her classic teenage mom story was rewritten because of Morgan State's sense of community, empathy, and compassion.

On campus, Baruti found the historically Black college and university (HBCU) delivered more than just the promise of education; it gave her a support system. When an unplanned pregnancy almost stymied her college career, faculty and students rallied around her to make sure she graduated from college.

"I would bring my son to school, and they would watch him," she recalled. "Dean Eugene DeLoatch introduced new scholarship opportunities that I could apply for to help cover the costs of being a mom and college student," she said.

Baruti also got support from Dr. Adeboyejo Oni, former industrial engineering professor at Morgan State, Ms. Karen Peace, who recently retired, and Mrs. Judith Wise, onetime special assistant to DeLoatch. Baruti still meets up with her old friends from Morgan State once or twice a year.

"There's great value in small schools, historically Black colleges with a family-like atmosphere," Baruti said. "That kind of environment makes all the difference for people with mitigating circumstances and family or life situations. Morgan allowed me to grow, provided me in-kind benefits, and identified with my experience in a way I'm not sure I would have found in a larger campus."

After graduating with a bachelor's

degree in industrial engineering from Morgan and a master's degree in systems engineering from Johns Hopkins University, Baruti went on to work at Lockheed Martin for 17 years before moving to an oil and gas company, Arkel International, and then Harris Corporation.

No matter where she goes, Baruti makes sure to carve out time to give back. While at Lockheed, she set up a Lifetime Alumni account, worked on Lockheed-Morgan State University industry relations, chaired the Industrial & Systems Engineering Advisory Board, and supported the ABET-accreditation process. In recognition of her outstanding service, Baruti was recognized with Morgan State University's Presidential Appreciation Award for Engineering Alumni, which was presented by DeLoatch, now dean emeritus of the School of Engineering at Morgan State; Morgan State University President David Wilson, and former Maryland Governor Martin O'Malley.

Baruti has shown the same passion for Southern University A&M College, a historically Black college in Baton Rouge, LA, and one of the 15 HBCUs with ABET-accredited schools. Now in Florida with Harris Corp., she supports local science, technology, engineering, and math (STEM) programs and community activities such as Neighbor Up Brevard's the DOCK.

Baruti also supports the annual BEYA STEM and WOC STEM conferences. In February, she served on two professional seminar panels at the BEYA STEM Conference, which is co-hosted by the Council of Engineering Deans of the Historically Colleges and Universities, Career Communications Group's *US Black Engineer* magazine, and Lockheed Martin.

I would tell my 17-year-old self:

- Go where you are valued
- Bring your authentic self to campus/work every day
- Don't stifle your thirst for knowledge
- Be the extra in extraordinary
- Turn every "no" into a "know"



# NI FIND SUCCESS

by Lango Deen | ldeen@ccgmag.com

**Matthew Reeds** learned many life lessons from his college days at Morgan State University, Maryland's preeminent public urban research university. Among them was the value that each one brings to the table.

Reeds entered Morgan State in 2013 with a fistful of scholarship dollars, including The Legg Mason Community Scholarship. The scholarship—which was established to provide tuition for eligible Baltimore City public high school graduates who wish to pursue their education at a four-year public institution in the state of Maryland—was renewable after Reeds' first year of college.

In 2017, Reeds graduated with a bachelor's degree in information science and systems and a GPA of 3.7/4.0. He landed a position at Goldman Sachs and then Legg Mason, where he is currently an associate in the corporate social responsibility/corporate philanthropy team.

"After I graduated from Baltimore Polytechnic Institute, I searched for institutions that were not only culturally relevant but also versatile. Morgan State was the ideal institution for me, as it provided a level of academic rigor that rivaled some of the top institutions while molding me into the young professional that I am now," Reeds said.

Reeds' mother, a first-generation student, graduated from Baltimore's Coppin State University and went on to a successful career as an educator. More than 70 percent of the students attending Morgan State come from within the state of Maryland.

"My advice to a prospective student would be to prepare yourself to be tested and challenged. Prepare to be loved, for the people at these institutions not only want to see you succeed but also want to see you develop," he said.

Reeds made the dean's list (2013-2017) and was named "Most Outstanding First, Second, Third, and Fourth Year Student" (2014-2017). He served as student regent

(2016-2017), representing the student voice on the board of regents. The governor of Maryland appoints board members for six-year terms, except for the student regent, who is appointed for a one-year term. The board appoints the university president, sets admission standards, approves university policies and budgets, and establishes the rules and regulations within which individual units operate.

"I have always been an advocate of giving back to those who have helped you to achieve," Reeds said. "While I was still a junior in the Earl E. Graves School of Business, I donated \$5,000 to Morgan State to encourage alumni donations. As a senior in college, I developed the Reeds Autism and Sarcoidosis Fund, a nonprofit that combats the social, political, and financial constraints that those impacted with autism and sarcoidosis face."

Recently, Reeds was appointed to serve as a member of the Morgan State University Foundation. The organization advances the university's mission of teaching, research, and community outreach by raising and managing private funds for scholarships, faculty, research, facilities, and academic programs. The foundation addresses the needs of the university community in areas where government funding is limited or unavailable.

"I believe HBCUs matter more than ever," Reeds said. "Birthed in basements after the Civil War, HBCUs were created to educate Blacks, (who) were not allowed into higher education institutions of the time. The role of the HBCU may not function the same way; however, its role is just as valuable. We currently operate in a political climate that permits certain narratives about minorities, people of color, and those without financial support. HBCUs mitigate the social pressures that many of these groups

face by educating and elevating them. HBCUs have functioned as the backbone for thousands of black families, and they will continue to do so in the distant future!" ■

"Morgan State was the ideal institution for me, as it provided a level of academic rigor that rivaled some of the top institutions while molding me into the young professional that I am now," Reeds said.





# HOW GLF IS BUILDING A STEM FUTURE FOR 2050

by Gale Horton Gay | editors@ccgmag.com

Before a grand idea can be put into place and successfully executed, it needs a solid foundation. For Kendall Norris, CEO of Global Leadership Forum (GLF), this is a guiding principle in his leadership of the forum, which he's headed since 2017.

The forum is the brainchild of David L. Steward, founder and chairman of World Wide Technology, Inc. (WWT), a technology solution provider with \$11.2 billion in annual revenue and more than 5,000 employees. The forum's mission is to, with the aid of its partners, inspire interest in young African-Americans in science, technology, engineering, and math as well as help older individuals obtain the education and experience necessary in these fields to advance to senior positions.

For the past year, GLF has been focused on getting its house in order.

"During my first year, we were still kind of a startup company," said Norris, "putting things in place updating bylaws..."

Based in St. Louis, MO, GLF reached an agreement with United Way of Greater St. Louis for office space and outsourced several key functions to United Way as well. Grant writing, research, and technical support are now provided by United Way personnel.

"That's a very big help for us," said Norris.

GLF's partners in carrying out its mission are Black Data Professionals Association, Black Women in Science, Information Technology Senior Management Forum,

Career Communication Group, NPower, and National Academy Foundation. The leaders of these organizations met in November 2018 for a gathering that included a daylong "rubber meets the road" meeting to start discussions on the fundamentals of GLF.

"You don't want just to go willy-nilly creating a bunch of partnerships... without having that formality in place to make situational decisions on which we can build and grow," said Norris.

"Before now it's been an informal partnership based on the idea that we're greater together than anyone singlehandedly. We can have more impact, more influence, mobilize funding, and bring others to the fold."

The leaders agreed to have representatives from their organizations be part of GLF's advisory board, and those board members have been meeting twice monthly hammering out issues about governance of GLF and developing a road map for moving forward.

"They have been tasked with defining the structure around this organization," said Norris.

Despite focusing on its structure, GLF has not neglected those it was formed to help—young people.

GLF held its annual summit this year on April 17 at WWT's headquarters in St. Louis, and in addition to educators, corporate leaders, entrepreneurs, and politicians, students were also present and a part of the program. A robotics team showcased its robots, and four high school students, as well as a recent graduate of an NPower program, were panelists in a discussion entitled "Let's Listen."

Norris said it was important to have the "grown folks listen to the students. It was the most powerful discussion of the day."

According to Norris, the students shared their aspirations and their needs, and a common theme that the students spoke about was being heard ("They feel talked at without being listened to"), mentorship, and an interest in trying new things.

The summit, which attracted an audience of 150, featured a breakout session that addressed topics such as racing innovation, future of social change, leadership starting at the top, and reinventing early education. The next summit is scheduled for April 9, 2020. ■



THE FORUM'S MISSION IS TO,  
WITH THE AID OF ITS PARTNERS,  
INSPIRE INTEREST IN YOUNG  
AFRICAN-AMERICANS IN SCIENCE,  
TECHNOLOGY, ENGINEERING,  
AND MATH AS WELL AS HELP  
OLDER INDIVIDUALS OBTAIN THE  
EDUCATION AND EXPERIENCE  
NECESSARY IN THESE FIELDS TO  
ADVANCE TO SENIOR POSITIONS.



**Kendall Norris**  
CEO, Global Leadership Foundation (GLF)



# THE TECH INDUSTRY'S BRIGHTEST

# SUPER

When David L. Steward, founder and chairman of World Wide Technology, Inc. envisioned **Global Leadership Forum (GLF)**, he had an idea to connect the world's leading STEAM organizations who are engaging, educating, empowering, and transforming underserved communities, and building tomorrow's workforce. Together, they would enable the socio-economic transformation of underserved communities around the world.

Today, **GLF** has partnered with **Black Data Professionals Association, Black Women in Science, Information Technology Senior Management Forum, Career Communication Group, NPower, and National Academy Foundation**, to carry out the founding vision.

We celebrate outstanding members from these organizations who best exemplify the values and missions of GLF and their organizations.

## KEVIN SUMMERS

*Chief Information Officer*  
**Avnet**



As CIO, Kevin Summers has responsibility for Avnet's global IT strategy and enterprise effectiveness initiative. He leads the company's global information solutions team and sets the IT roadmap strategy that helps differentiate Avnet as a technology leader. He also has oversight to ensure implementation and synergy of systems and processes across the organization. Summers received his Bachelor of Science degree in computer science from College of Charleston and an M.B.A. from Duke University.

## TIMOTHY ATWELL

**Bank of America**

Tim Atwell, data technology executive at Bank of America, joined the company in 2005. He effectively leads the enterprise function on data governance through the delivery of key data milestones and improvements to the overall control environment. He is accountable for driving enterprise data followership/alignment across key stakeholder groups. Most recently, Tim led the company's



compliance program in response to the high profile European Union General Data Protection Regulation (EU GDPR). Atwell is a graduate of North Carolina A&T State University and has been featured on the cover of US Black Engineer & IT magazine. Tim can be found speaking on leadership panels and delivering Christian based character presentations for numerous non-profit organizations.

## JEROME "JERRY" FOX

*Senior Vice President and Chief Information Officer*  
**BJC HealthCare**







# STARS

Jerry Fox Jr. joined the BJC team in 2017. Fox is an innovative information technology executive with over 30 years of experience. Some of Fox's responsibilities include planning, developing, and supporting information technology and telecommunications initiatives throughout BJC's hospitals and service organizations. Fox holds a bachelor's degree and M.B.A. from Ohio University in Athens, OH. He is also an active volunteer with the IT Senior Management Forum.

## ERIKA JEFFERSON

*President and Founder*  
**Black Women in Science and Engineering (BWISE)**



Erika Jefferson is the president and founder of Black Women in Science and Engineering (BWISE), an organization that is bridging the leadership gap for black women in the STEM fields. She is a product management and business development professional with qualifications in managing large accounts and developing client relationships. She has additional experience in Lean Six Sigma, manufacturing operations, and supply chain management.

## DENISE FLEMING

*Vice President, Information Technology Business Partners*  
**Boeing Defense, Space, & Security (BDS)**

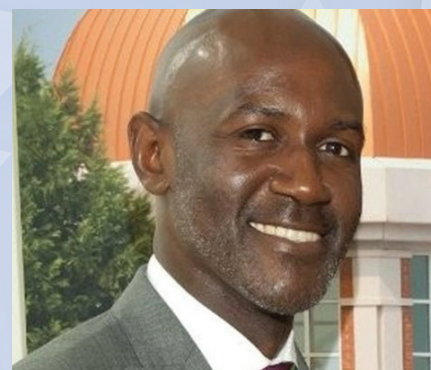


Denise Russell Fleming is vice president of IT for BDS. She is responsible for delivering innovative digital solutions to align with BDS' business strategy. Fleming earned a Bachelor of Science degree in electrical engineering from University of Virginia and an M.B.A. from Duke University. She was awarded the 2012 Women of Color Technology Award for Career Achievement and is a 2014 inductee into the BEYA Hall of Fame.

## MICHAEL CATO

*Senior Vice President and Chief Information Officer*  
**Bowdoin College**

Michael Cato serves as senior vice president and CIO at Bowdoin College. Cato facilitates all aspects of information technology strategy, fosters innovation, and guides the institution to discover new ways to use technology to support its mission. Cato earned his M.B.A. at Wake Forest University and his Bachelor



of Science degree in zoology at Andrews University in Berrien Springs, MI.

## SALISA L. BERRIEN

*Founder and Chief Executive Officer*  
**COI Energy**



SaLisa L. Berrien is the founder and CEO of COI Energy. In 2013, she established the COI Ladder Institute to focus on delivering leadership and empowerment services to millennials and women to elevate their careers or businesses to the next level. Berrien has also created several scholarship funds for high school and college students. She holds a degree in mechanical engineering from the University of Pittsburgh and an executive



M.B.A. from Saint Joseph's University.

### **TERRY MORRIS**

*National BDPA President & Director  
IT*  
**Eli Lilly**



Terry Morris was elected national president of the BDPA in August 2017. He is the director of IT medicines at Eli Lilly and Company and has been providing information technology solutions in the medicines development unit for over a decade. Morris graduated from Florida A&M University in 2000 with a bachelor's degree in computer and information sciences. He also has a master's degree in public affairs.

### **ALICIA BUTLER PIERRE**

*Founder and Chief Executive Officer*  
**Equilibria, Inc.**



Alicia is the founder and CEO of Equilibria, Inc., a 14-year-old operations management firm specializing in business infrastructure for fast-growing companies. Equilibria is currently the world's largest and most comprehensive repository on business infrastructure for small businesses. Pierre has a B.S. in chemical engineering from Louisiana State University and an M.B.A. from Tulane University. She is the host of the Business Infrastructure: Curing Back

Office Blues podcast and the author of *Behind the Façade: How to Structure Company Operations for Sustainable Success*.

### **LATASHA GARY**

*Senior Director of IT*  
**Hewlett Packard, Inc.**



Latasha Gary provides support to a wide variety of businesses and functions. Gary is responsible for leading large-scale ERP implementations and portfolio management. She is recognized in the industry for solving complex problems across diverse business units on time and within budget. Gary received her Bachelor of Science degree in computer science from Texas A&M University and a Master of Science degree from Howard University.

### **VIOLA MAXWELL-THOMPSON**

*President and Chief Executive  
Officer*  
**Information Technology Senior  
Management Forum (ITSMF)**



Viola Maxwell-Thompson is a retired partner with Ernst & Young where she specialized in organizational development and tech deployment. Since taking the helm at Information Technology Senior Management Forum (ITSMF) in 2004, the organization has

significantly broadened its reach in supporting the growth of a diverse technology workforce through its leadership development programs, collaborative partnerships, college scholarships, and community outreach.

### **JAMES WILKINSON**

*Chief Information Officer, F-35*  
**Lockheed Martin Aeronautics**



James Wilkinson inspires technology teams to tackle challenges, examine situations from multiple perspectives, implement actions to overcome obstacles, and deliver high-quality, mission-relevant deliverables. He has been a key motivator and uniquely combines his technology expertise with a knowledge of information security and business operations. Wilkinson led major transformation projects for the U.S. Army, the U.S. Marine Corps, and an American international banking and financial services holding company.

### **JD HOYE**

*President, NAF*  
**National Academy Foundation**



NAF attracts talent, based in large measure on its mission of making students career-ready. Seeing the impact of the workplace in reigniting career ambitions, JD Hoyer has led college and career preparation initiatives at local,



regional, state, federal, and now national levels—always driven by the incredible impact public-private partnerships can have on young people and their futures. She joined NAF in 2007.

### LAKIESHA C. TOMLIN

*Department Manager, Flight Test Engineering*  
**Northrop Grumman Corporation**



Lakiesha C. Tomlin is a flight test engineering department manager at Northup Grumman Corporation. In her role, she provides technical leadership to programs in the areas of electronic sensor and radar systems. She also regulates the department budget of nearly \$1 million in the capital, material, and labor expenditures. Tomlin holds a Bachelor of Science degree in mechanical engineering from St. Louis University and a Master of Science degree in technical management from Johns Hopkins University.

### BERTINA CECCARELLI

*Chief Executive Officer*  
**NPower**



Bertina Ceccarelli, CEO of NPower, is on a mission to move people from poverty to the middle class by empowering disconnected youth and military veterans with in-demand skills and employment



opportunities to launch successful tech careers. NPower offers their free tech training in New York, New Jersey, Maryland, Missouri, Texas, California and Toronto, Canada.

### SABINA A. EWING

*Vice President*  
**Pfizer, Inc.**  
**Upjohn Business Technology**



Sabina Ewing's impact on Pfizer is evident in the numbers. As the Head of Business Technology for the Upjohn Division, Sabina is accountable for technology strategy, solutions, and services for this \$10B+ business from its new global headquarters in Shanghai, China. She's also successfully delivered enterprise solutions impacting 90K+ colleagues across 95+ countries. As the immediate past Chair of Pfizer's Global Women's Council and former member of the Global Blacks Council, she's passionately advanced actions to support enterprise wide diversity and inclusion.

### MICHAEL SULLIVAN

*Vice President and Chief Information Officer*  
**Southern Company Gas**



Michael Sullivan has 33 years of experience in his industry. In his role, Sullivan leads all aspects of the strategic delivery of technologies that support Southern's gas utilities and related businesses. A highly collaborative business partner, Sullivan focuses on delivering an IT strategy that enables the company to achieve its goals and objectives while aligning with the overall enterprise IT strategy across the Southern Company System. ■



# Top 5 Values of a STEM

## that every young professional and student should know

**IN** June 2017, W. Thomas Stanley hosted NetApp's 25th-anniversary celebration at one of its worksites. A 30-year technology industry veteran himself, Stanley has served as senior vice president (SVP) and general manager of the Americas for NetApp since 2015. Other positions he has held at NetApp include SVP, Global Partner Sales and Alliances, vice president, Global System Integrators and Alliances, and various management roles at IBM, where he worked for more than eight years. Stanley also serves on the Board of Visitors at North Carolina A&T State University, Boys Hope Girls Hope International and is a member of the Executive Leadership Council.

After graduating from North Carolina A&T with a bachelor's degree in computer science in 1988, Stanley earned an M.B.A. from the University of Minnesota - Carlson School of Management in 1996.

"The M.B.A. balanced the technical with outcome-based work," Stanley said. "Understanding technology was important, but the outcome-based discussion was also important. Having an M.B.A. rounded me out."

Stanley added his wife has often said that although she went on to earn a Ph.D. in engineering, worked in business, and taught at college, there are days she wishes she had an M.B.A.

"An M.B.A. gives you social confidence in terms of understanding business, how they operate, and how to add value to the enterprise," Stanley said. "I think she's right. Part of me getting the M.B.A. and why I prescribe it is that the exposure and opportunity round you out in terms of experience."

Stanley grew up about three and a half hours by car from North Carolina A&T University. A love for math during high school and a lack of interest returning to work in agriculture, plus input from his guidance counselors took him down the path of computer programming.

By the time Stanley finished high school, North Carolina A&T's computer science program was a couple of years in the making. Stanley was in the second or third class to graduate with a computer science degree. He has one word for his N.C. A&T experience: tremendous.

"I met my wife there while she was getting her undergraduate and master's degree in electrical engineering. So, with our combined 3 A&T degrees, we have a lot of love for the university," he explains. "Two of our three children are students there. One is a senior (kinesiology), and the other is a sophomore (bioengineering). We have one in high school, who says she's going to go to A&T as well."

As SVP in NetApp's largest geographic region, Stanley endeavors to create a safe space for work-related conversations, but is a stickler for rules on performance and character.

"I try to make sure they view me as someone genuinely interested in them being successful, and I require of them not to be prideful about needing help. Right or wrong, you don't just represent yourself when you show up. Bring your best self to the job," he said.

On character, Stanley's view is that it's not just what you get done, but how you do it that matters. "How you treat people, show up in a meeting. Are you prepared, are you on time, have you dressed appropriately? I tell them that

they stand out every time they walk in the room. Be proud of that."

He cautions against overcompensating. "I have done that in my career," he said candidly. "Where I thought the room was seeing color and not listening to me or seeing me. You're not always right when you make that assumption," he warns. "You have to be careful not to be a victim in a situation which is just a difference about opinion, or a different view, or quite frankly may be intended as constructive criticism. You shouldn't exclude reality, but your priority should be making sure you put forth a quality product every day."

The digital landscape is really about data, he said. It's how people make decisions with data and interact with data. Starting with everyday examples, the NetApp exec asks young people to look at how they can influence banking, commerce, transportation, and healthcare over the next 10, 20, 30 years. "That's what businesses are trying to do with digital transformation. How they drive revenue, processes, and how businesses compete.

"I get to go on that journey with disruptive tech companies, in different industries using different technologies," he said. "When I think about digital transformation, I try to find programming and technology that changes business and changes lives."

Still, Stanley says social skills are key. "For NetApp, it's not just about technical and business competence. All of the STEM-related skills are critical, but not at the risk of poor social skills. Now, more than ever, people are working in groups and teams and the ability to collaborate with others, to drive joint outcomes, is just critical," he says. ■



# Life

Starting with everyday examples, the NetApp exec asks young people to look at how they can influence banking, commerce, the auto industry, and healthcare over the next 10, 20, 30 years.

## ■ Tips for students and recent grads

1. Take advantage of every opportunity you get to learn.
2. Be comfortable taking roads less traveled.
3. Get involved in groups that are advancing education.
4. Learn from your peers and mentors.
5. Don't allow outside interests to outweigh assignments.

**W. Thomas Stanley**  
Senior Vice President, Americas  
NetApp





# NetApp is Proud to Be Recognized by CCG as a Top Supporter of HBCU Engineering Schools

## Driving a Culture of Belonging for All

### Our People:

We celebrate the diversity of perspectives, cultures, traditions, and experiences our employees represent to drive innovation, engagement, collaboration and business success. We recognize each employee's individual contributions and embrace talent in all forms.

### Empowering Our Customers to Change the World with Data

NetApp is the Data Authority in hybrid cloud. We are uniquely positioned with the most innovative portfolio and unsurpassed expertise to help customers create the data architecture and hybrid cloud data services needed to unleash the full potential of their data.

### Students up level your skills through the NetApp Certified Storage Associate-Hybrid Cloud (NCSA-HC) Certification

Gain a competitive edge, build your resume, and explore new opportunities. To get started on the NCSA-HC contact us at **[academic@netapp.com](mailto:academic@netapp.com)**

Join us to unleash the power of data to make an impact to the world.  
**<https://www.netapp.com/careers>**

Follow us at LifeAtNetApp on





# BEYA FOUNDERS RECOGNIZED BY NATIONAL SCIENCE BOARD



PHOTO CREDIT: NSF/ALLISON SHELLEY

## **Eugene DeLoatch and Tyrone Taborn were honored by the National Science Board (NSB) in May for their exemplary service in promoting public understanding of science and engineering.**

The NSB presented DeLoatch and Taborn with the NSB Public Service Award at the National Science Foundation Annual Awards Ceremony held in Washington, D.C. The Public Service Award recognizes people and groups that have increased the public's understanding of science or

engineering. Past award recipients include the American Museum of Natural History, the Alfred P. Sloan Foundation, and the PBS television series NOVA.

“As a team and individually, Eugene DeLoatch and Tyrone Taborn have spent much of their lives working to ensure that all Americans have equal opportunities to excel in science and engineering,” Kent Fuchs, chair of the NSB’s Committee on Honorary Awards said in the release. “Their work has significantly contributed to our nation’s global leadership in science, engineering, and technology, ensuring that the best and brightest in our communities have pathways to success.”

Their annual event is recognized for having increased the enrollment of minorities in engineering programs across the country, enhanced scientific and engineering literacy in minority communities, and opened the doors to discovery and innovation among broad segments of minority populations.

Over 33 years, the Black Engineer of the Year Award (BEYA) Conference has exposed more than 100,000 students to role models in science, technology, engineering, and math (STEM) careers. More than 10,000 men and women have been nominated for Black Engineer of the Year Awards; 957 have received category awards, and 33 have been selected as Black Engineer of the Year. ■





**Mike Mahoney**  
Chairman and CEO

300 Boston Scientific Way  
Marlboro, MA 01752  
508.683.4111 Tel  
508.683.4778 Fax  
[mike.mahoney@bsci.com](mailto:mike.mahoney@bsci.com)  
[www.bostonscientific.com](http://www.bostonscientific.com)

May 21, 2019

Dear Tyrone,

I heard the great news that you and Dean DeLoatch received the 2019 NSB Public Service Award. Congratulations on this incredible achievement!

I can't think of two people more deserving of this honor. You have done so much to showcase and celebrate the accomplishments of STEM leaders, while also promoting better access to STEM careers in underrepresented communities. I'm so thankful for your leadership and that Boston Scientific was introduced to the community of excellence you created.

Your work has benefitted so many, including Boston Scientific. Our involvement with the BEYA conference has allowed us to recruit some of the best young minds in science in engineering. In fact, this past year we extended 37 offers to STEM summer interns with a 75% acceptance rate, and 35 of these offers were made on the spot at the BEYA conference. Exposure to these STEM leaders is invaluable to advancing science, and I look forward to attending the conference in 2020 – which Camille made sure was on my calendar as soon as dates were announced.

Best wishes and congratulations again,

A handwritten signature in blue ink, appearing to read "Mike Mahoney".

Mike Mahoney

Cc: Camille Chang Gilmore, VP HR - Global Chief Diversity Officer

Lockheed Martin Corporation  
6801 Rockledge Drive Bethesda, MD 20817  
Telephone 301•897•6565 Facsimile 301•897•6611



**Marillyn A. Hewson**  
Chairman, President and Chief Executive Officer

May 13, 2019

Mr. Tyrone Taborn  
President and CEO  
Career Communications Group, Inc.  
729 East Pratt Street  
Baltimore, MD 21202

Dear Tyrone:

I want to extend my sincere congratulations to you for receiving the 2019 National Science Board Public Service Award.

This is a well-deserved honor and a testament to your vision, leadership, and impact. At Lockheed Martin, we have been – and continue to be – proud to partner with you to promote opportunities in science, technology, engineering, and math. And we know from our work together over the decades that you have made a tremendous difference, especially in our nation's historically black colleges and universities.

Thanks to your efforts, countless individual lives have been transformed – and our nation, economy, and society have been strengthened at every level.

On behalf of all of us at Lockheed Martin, we are deeply grateful for your personal dedication and professional support in expanding the diversity in the STEM talent pipeline and for what it has meant for our own company's success, technological leadership, and commitment to opening the doors of opportunity to all.

Once again, I congratulate you on this tremendous honor from the National Science Board, and I thank you for your efforts to break down barriers in STEM education. Through our ongoing partnership, I am confident that we can continue to reach out to those from underrepresented communities, expand hope, and build a brighter future for all.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Hewson".

Marillyn A. Hewson





**USC** University of  
Southern California

**WANDA M. AUSTIN PH.D.**  
*Interim President*

April 22, 2019

Mr. Tyrone Taborn  
Career Communications Group, Inc.  
729 East Pratt Street  
Baltimore, Maryland 21202

Dear Tyrone,

I was delighted to learn that the National Science Board awarded you and Eugene DeLoatch its 2019 Public Service Award. This well-deserved recognition speaks to your excellent efforts to promote science and engineering among a wider audience. We all appreciate your leadership in this area.

Please accept my warmest congratulations. With best regards,

Sincerely,

A handwritten signature in blue ink that reads "Wanda".

Wanda M. Austin  
President

University of Southern California  
Los Angeles, California 90089-0012 • Tel: 213 740 2111 • Fax: 213 821 1342

**NICHOLAS M. DONOFRIO**

IBM FELLOW EMERITUS AND EVP INNOVATION & TECHNOLOGY RETIRED  
RIDGEFIELD, CT

April 28, 2019

Dean Eugene DeLoatch  
Tyrone Taborn

Dean Gene and Ty,

Congratulations on your recognition from the National Science Board!

I have the benefit of being a witness to your work since the launch of BEYA. The follow-on creation of AMIE was an appropriate introduction to America of a national treasure, her HBCU engineering community.

My personal journey as an observer and industry partner has made me an informed reviewer of your contribution. It is not just how long you have done what you have done. It is the importance of your work to our nation. I am intimately aware of our changing demographics, and the resulting impact on our technical talent needs and marketplace performance. It is important that we all understand the value of your work. It is clear to me that America will not win in the global technology competition without the full engagement of her HBCU team.

Your work is clearly worthy of this award. It validates that we must be relentless in recognizing and mining the diversity of our talent pool. It also demonstrates your patriotism. In the current national climate, our mutual respect for the need and existence of our diverse talent is missing from our public discourse. Your leadership in the identification, development and display of our diverse technical talent is a national asset.

Thank you for the consistency of your effort in demonstrating to generations of our youth of color their true ability and its value. Please understand that your patient, unyielding message to White America that these are our children representing our nation, and we must invest in, and embrace them is being heard and is making a difference.

Am happy for and proud of you both.

Cheers ... Nick





**Viola Thompson**, President and CEO of ITSMF

# LEADING VOICES

*US Black Engineer & Information Technology (USB&IT)* magazine launched the maiden issue of Leading Voices (LV) in the fall of 2017. Broken up into three or four columns written by inventors, entrepreneurs, and STEM policymakers, the section spotlights the 14 challenges outlined by the National Academy of Engineering, and disruptors such as artificial intelligence (AI) and bioengineering. During its first year, LV has provided perspectives on smart cities, building a weather-ready nation, and where AI is in your future, an auspicious start for one of *USB&IT Magazine's* newest sections. Leading Voices is available in print and online at [www.blackengineer.com](http://www.blackengineer.com)

## LEADING VOICES

### Contributing Editors

**Viola Thompson**  
President and CEO  
ITSMF

**Dr. Denée Thoma Mwendwa**  
Associate Professor, Psychology  
Howard University

**Erica Jefferson**  
President  
Black Women in Science and Engineering

**Bertina Ceccarelli**  
Chief Executive Officer  
NPower

## Retaining Black Females in STEM

Before the role I have today at the Information Technology Senior Management Forum (ITSMF), I spent 25 years in corporate America, primarily in the technology consulting industry. I worked for Arthur Young & Co., and then ultimately Ernst & Young in its management consulting practice. The company was predominantly run by white males when I joined the firm, and I didn't initially have a desire to be a partner in the firm. However, as I started navigating and spending more time there, it became very apparent that no one who looked like me was sitting in a partnership position. There were Black males, yes, but there were no Black female partners in the management consulting practice at all.

Fast forward the scenario through a host of discussions, conversations with higher management, misunderstandings, and awareness-raising, and I became the first Black female partner ever in the management consulting firm at Ernst & Young. At that point, I thought the diversity problem existed only at my firm, not across our industry. I remained at the firm until another merger transpired, and I realized that many corporate initiatives didn't align with my values. That's when I took a leadership position at ITSMF. Transitioning to this organization meant so much to me. I saw ITSMF as a group of people, all of them at senior levels in technology, who were still fighting the equal representation fight and working to figure out what it took to get to the C-suite. However, when I looked at the demographics of ITSMF, I realized the makeup was predominantly Black men. I quickly saw that the gender balance misalignment was the same situation I had left. The industry still didn't seem to have an unbiased focus on equal representation.

Analyzing the overall industry, we at ITSMF found that the gender makeup was roughly 70 percent men and 30 percent women. Of that 30 percent, the number of Black women hovered around 3 to 4 percent. We continued analyzing demographics across the industry through a partnership with Accenture, a company that had already done

significant research on white women in the technology sector, but not women of color. Accenture felt it would be a great opportunity for us to work together to understand the discrepancies pervading the technology sector. Our research showed an equal gender divide when looking at mid-level managers. However, when we looked at the rise into more senior and C-suite level positions, the divide increased dramatically.

We wanted to understand why that was happening, why it was such a challenge to retain women of color in this industry, and what we could do as an organization to address it. After conducting focus groups and surveys, we found there were more than a few factors Black women acknowledged that could have influenced the imbalance of cultural and gender equity in high management. Black women felt that they were not getting the right exposure. They also felt that they didn't have the right people as sponsors or advocates to speak for them when conversations about up-and-coming candidates arose. The women also felt that they needed additional development and learning for new technology initiatives. This likely stemmed from the belief that they were not getting exposure to the right opportunities that would showcase their readiness for senior-level positions. It was disheartening to know that these discrepancies existed, but it was information we needed as an organization.

Along with other issues such as how to prioritize work and life, the data also showed that Black women did not feel as if their work environments were inclusive, welcoming, or open to embracing them. As a Black woman, I completely understood that. Consider the fact that, traditionally speaking, white males are primarily responsible for deciding who will advance to get coveted opportunities in corporate America. Also, consider the fact that they will most likely advocate for someone with whom they feel comfortable and have some commonality. Now consider the idea that white men can relate to Black men on a gender level, and they can relate to white women on

a racial or cultural level. What's missing? They have absolutely nothing in common with Black females! That is the outlook that many Black women have in corporate America.

Considering all the data and experiences of our core demographic, we at ITSMF strive to help each Black woman understand her strengths. In our formal learning academy, EMERGE, we help develop who she is at her core so she can bring her authentic self to the forefront of the corporate arena. We challenge her with these questions: Who are you? What are your strengths, and how can you leverage them to stay in the game and get a senior-level position (assuming that is a professional goal)? When you get the position, how will you navigate the challenging environment? ITSMF develops foundational roots in Black women by helping them answer these pivotal questions. Once they've developed and truly understand their answers, they will be resolute in their professional journeys. They will also know that they are not alone, they are not broken, and they are capable. Finally, they will believe they can truly be successful as senior-level executives.

Why is all this important? Current statistics show that 50 percent of Black women who enter the technology industry leave. So how will our industry ever amass any numbers if that's the case? It's incumbent on corporations to not only talk about diversity and attracting diverse talent, but to also assess what they are going to do to ensure that diverse professionals feel that they belong there. Empowering women is only one side of the coin. The other side of instilling organic interest in diverse talent, specifically Black females, is creating genuine awareness. Senior-level executives must understand that, in the discussions regarding diversity and inclusion, "inclusion" should precede "diversity." The equation is simple: If you create an inclusive environment, diversity will follow!

When we talk about true inclusion, though, it's more than proverbially

being "invited to the party." Once we're there, we want to be asked to dance. Further, we want to know some people WANT to dance with us! Those things matter on a relational level, and they matter as much on a professional level. That understanding has to start at the top, and then it will permeate throughout the organization. If there is an environment where board members and high-level executives running the company are diverse, individuals who are aspiring to those positions will see their opportunities as genuine possibilities to advance.

---

**Along with other issues such as how to prioritize work and life, the data also showed that Black women did not feel as if their work environments were inclusive, welcoming, or open to embracing them.**

**As a black woman, I understood that.**

---

Understanding this landscape is like playing chess. We at ITSMF have three academies that we offer to help women understand the game they must play to compete at this level. There are unwritten rules that many have no idea about and, in some cases, may have tripped over in their professional environment. It's helpful for Black women to recognize what those rules are and how to navigate the field. One aspect of our training incorporates

the PIE model of success, presented by Harvey Coleman, which focuses on performance, image, and exposure. We ask our participants: What do you look like professionally? How do you show up? How do you talk in this environment? Who knows you? How often are you in front of people who don't look like you and may not be aware of your expertise? How often are you writing papers and articles so that people who don't know you are given an opportunity to know you and get a sense of what you can bring to the table?

The academies represent our "secret sauce," nurturing the "mind, body, and soul" of an individual, and it's working extremely well. Over the 15 years of the academy's history, ITSMF has witnessed over 500 individuals go through its development curriculum. I'm proud to say 75 percent of those participants have received a promotion or increased job responsibilities within 18 months! There is a direct correlation to their participation in our programs, the mentoring, the executive coaching, and the experiences in our academies. The managers and senior-level executives sponsoring these Black and brown professionals in the programs see the difference. They have reported seeing more confident women and men making an impact around the office. They see individuals who understand what is required to present an executive-level keynote. To say the program is a success is an understatement.

Our next step is to look at the work we could potentially do on the other side of the table, those who are in positions of authority, to help them understand and become more culturally sensitive. We are assessing what an offering might look like that we can present to corporations, so they know how to best leverage the brilliant minds residing in their companies. Those brilliant minds are ready, willing, and poised for success. We at ITSMF are here for them and the companies that value them. We stand ready to champion the collective successes of Black women and the corporations that embrace them as equals. ■





**Dr. Denée Thomas Mwendwa**, Associate Professor, Psychology, Howard University

# Stress and Health: Managing Stress in your Daily Life

**D**o you deal with stress daily? If so, you're not alone. According to the American Psychological Association, 74 percent of polled respondents stated they regularly experience at least one symptom associated with stress, including headaches, muscle fatigue, pain, and gastrointestinal problems. Forty-five percent of those respondents stated they have insomnia. Another 37 percent said they eat unhealthy food or overeat because of stress in their lives.

The top sources of stress include jobs, school, finances, health-related problems, and interpersonal concerns. Before discussing the effects of stress on health, it's important to understand some of the key aspects of stress. First, it is important to note that we researchers of stress cannot agree on one definition. (That's not uncommon in the social sciences.) However, what we do agree on is that there is one physiological stress response that doesn't differentiate between physical and psychological stress.

Stress can affect people positively or negatively. Whereas positive stress motivates us to do better with tasks such as tests or projects, negative stress can cause anxiety, worry, or sadness. Stress also involves a great deal of perception. How people think about their stress and how they cope with stress varies from person to person. As a health psychologist, I'm primarily concerned about physiological responses to stress because it has a direct impact on a person's health. However, as a clinical health psychologist also, I am very concerned with perceptions about health and stress, and people's ability to believe they can deal with stress effectively. This is where I hope to be a significant change agent.

There are primarily two types of stress: acute and chronic. For acute stress, our bodies call on the sympathetic nervous system, which releases epinephrine and norepinephrine to ready the body for a fight-or-flight response. After the response to acute stress, the body

goes back to homeostasis. While there is indeed interest in acute stress, my work focuses more on the hypothalamic pituitary adrenal (HPA) axis system that deals with chronic, or long-lasting, stress. This system involves the hypothalamus, pituitary, and adrenal glands. Think of the hypothalamus as the command center that is ultimately responsible for the release of hormones. These hormones eventually make their way down to the

---

**“I’m primarily concerned about physiological responses to stress because it has a direct impact on a person’s health. However, I am also very concerned with perceptions about health and stress, and people’s ability to believe they can deal with stress effectively. This is where I hope to be a significant change agent.”**

---

adrenal glands at the top of our kidneys and release the stress hormone cortisol.

Cortisol helps mobilize the body to produce the energy needed to meet the demands of stress. However, with that long-term stress, there is hopefully an

end in sight. When it's over, the cortisol that provides energy should ultimately shut off. We refer to that as a negative feedback loop. However, under chronic stress, like helping with cancer on top of doing your everyday job, there isn't an end in sight. What happens then? There is significant wear and tear on that shut-off mechanism, and that leads to excess cortisol circulating in the body. Cortisol is very influential in the body's metabolism processes, inflammation reduction, and memory formation. When there is an overabundance of cortisol circulating in our bodies, it can lead to long-term health problems such as heart disease, hypertension, dyslipidemia, obesity, and other mental health disorders such as depression and anxiety.

Stress is a part of our everyday experience. It's unavoidable. However, we can embrace it by learning to deal with it. It is not easy, but it is possible. At Howard University, I am researching African-American women who are at risk for cardiovascular disease. We are developing an intervention for stress reduction using a form of meditation called mindfulness. Mindfulness, according to Jon Kabat-Zinn of the University of Massachusetts, involves bringing one's complete attention to the present experience on a moment-to-moment basis. It is present-oriented consciousness that is nonjudgmental and involves an awareness of each thought, feeling, and sensation. It's about being, not doing, and being intentional, not automatic. Consider a mundane activity like brushing our teeth. We do it every day without being aware of what we're doing when we do it. Mindfulness is the exact opposite. It focuses on being aware of the things we normally do and embracing them in the present moment.

I hope this information will spur you to consider some of the many techniques and tools available to you to reduce stress in your life. Managing stress can only lead to a healthier, happier, and more productive outlook and lifestyle. ■



**Erika Jefferson**, President, Black Women in Science and Engineering

# Where Are the Black Women in STEM Leadership?

**By training diverse women in science and tech to become leaders, the whole ecosystem benefits**

Today, Black women are working in every industry imaginable and doing jobs that, just a generation ago, we could only dream of. However, the number of those working at senior levels in STEM fields remains low. In March, the National Science Foundation reported that in 2016, Black women earned more than 33,000 bachelor's degrees in science and engineering, and 24 percent of doctorates awarded to Black women were in STEM. However, that same report showed that in 2017, only 5 percent of managerial jobs in STEM were held by Black women and men combined.

This disparity is occurring amid record employment levels, and there is a critical need for technical workers—but we cannot expect women and underrepresented minorities to remain in work environments where they cannot grow and thrive. We also cannot expect girls to enter fields where they do not see positive role models. It is imperative that we stop the constant drip from the leaky STEM pipeline by working hard to retain women—and especially underrepresented women of color.

At one time, Fortune 500 companies had their pick of graduates from the best schools. A brilliant young engineer from a top university will be heavily recruited but is just as likely to create her own company as she is to go work for a long-established one. Some industries are already feeling the impact of this and are trying to adapt.

While leaders may say this is to address the ongoing gender imbalance in technical fields, dig a little deeper and it becomes clear companies already know they will not have enough capable talent to fill these roles in the digital revolution and are trying prepare for the loss of a preferred demographic.

Globally, we are still struggling to attract and retain women in STEM fields. While the problem has been getting more attention, the change is occurring much too slowly. The underlying reasons why diversity and inclusivity have not

taken root have not changed over time. Women and minorities cite feelings of isolation, mistreatment by colleagues and management, and lack of opportunities for advancement as the reasons they leave STEM fields.

One solution is to create more diversity in emerging technologies by preparing women already in STEM for roles in leadership. These efforts would provide the skills necessary for diverse



For full article,  
continue

reading here:

[https://](https://womenofcolor.online/article_list/where-are-the-black-women-in-stem-leadership/)

[womenofcolor.online/article\\_  
list/where-are-the-black-  
women-in-stem-leadership/](https://womenofcolor.online/article_list/where-are-the-black-women-in-stem-leadership/)

women with traditional STEM degrees to transition into artificial intelligence, virtual reality, the Internet of Things, and cybersecurity while leveraging their previous experience. Such resources could ensure women with technical backgrounds get the support necessary to become leaders in these industries far more quickly than we could be waiting on the next generation of workers to advance.

By training diverse women already in technical roles to become leaders, the entire ecosystem benefits. Women scientists and engineers understand the challenges of working in male-dominated fields and can better prepare others wanting to learn how to excel in

management and entrepreneurship.

In 2015, we launched Black Women in Science and Engineering (BWISE) to support underrepresented women via networking, mentoring, and career development. The group consists of women with degrees in science, technology, engineering, and math, even if they no longer work in these areas.

With BWISE, employees can get what they need despite—or in addition to—company offerings. Here, they have a safe space to discuss challenges and receive coaching, training, and insight outside of the workplace. Companies can sponsor employees to be a part of BWISE to supplement their existing diversity efforts and can also assist by bringing in speakers and supporting our events. The organization helps to prepare, train, and develop the next generation of Black women leaders in STEM.

We also have hosted successful networking events across the country in Atlanta, GA; Austin, TX; Chicago, IL; Houston, TX; and Washington, D.C. Each event attracts the best and brightest in the STEM field, ranging from mid-career to top-level executives. In 2019, we will expand to three more cities—Boston, MA; Dallas, TX; and New York, NY—and provide more in-depth training in emerging technologies to meet the career demands of our membership.

The network of BWISE chapters and women around the world consists of experts and thought leaders in business, government, and academia who are focused on engaging and empowering girls and women everywhere to join the digital revolution. Our members from the U.S., Europe, and Africa are poised to become leaders in their own countries, impacting the lives of underrepresented people around the globe. By creating a more diverse workforce globally in emerging technology fields, we can help reduce gender-based financial inequities and be better prepared for the workplace of the future. ■





**Bertina Ceccarelli**, CEO, NPower

# Addressing the Shortage of Women of Color in Tech

Tech jobs are among the fastest-growing, highest-paying jobs across the U.S. Research consistently shows the tech industry is leaving behind diverse populations—chief among them: women of color.

The numbers are disturbing at the root. Currently, less than 16 percent of U.S. technology professionals are Latinx or African-American, and only 4 percent of technology professionals are women of color, according to the NCWIT. When it comes to tech leadership positions, Hispanic women make up less than 1 percent, while Black women make up less than 0.5 percent.

Perhaps even more staggering, women of color make up 80 percent of all new female-led small businesses in the U.S., but in tech, that number plummets to just 4 percent.

As the CEO of NPower, it's important for me to have honest—and at times, uncomfortable—conversations about the shortage of women of color in tech. A major strategic thrust at NPower is to help young women enter the IT profession, and to excel in these careers and fulfill their greatest potential.

On International Women's Day last year, NPower, with the support of Citi Foundation, committed to increasing the number of young women enrolled in our free tech programs from 25 percent to 40 percent by 2022. We also pledged to increase the representation of women among NPower's teaching staff across the U.S.—in cities like New York, NY; Dallas, TX; Baltimore, MD; and St. Louis, MO—to 40 percent by 2020.

Prioritizing the inclusion of women of color in tech is crucial for many reasons. For one, it's good for business. According to the CEO of CompTIA, diversity efforts could net the IT industry an extra \$400 billion in revenue each year. While many major companies proclaim their commitment to diversity, white men still make up the overwhelming majority of today's tech workforce.

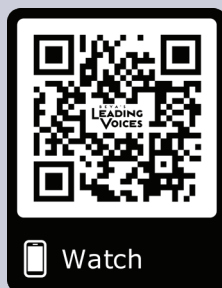
Secondly, technology skills are teachable and should not be limited to the privileged

few. There is a serious talent shortage in the industry with 8.6 million new tech jobs expected to emerge over the next decade.

And finally, tech jobs are some of the fastest-growing, highest-paying jobs available—why shouldn't minority women have a piece of the pie?

## Check out our Leading Voices

### YouTube Playlist"



<https://www.youtube.com/playlist?list=PLjlj5U3PacKfNHtcAjvjBK5l3o8ciKhB4>

This is why it's so important for us at NPower to empower women of color in the tech sector. And we are thrilled to have an aligned partnership with GLF, who also shares our mission to support minority communities.

### 40x22 - Helping Women of Color Advance their Careers

Through our "40 by 22" initiative, we've learned a great deal about the obstacles young women of color struggle with in tech. For instance, we've gained insight on how women lack role models in

the industry and feel an overwhelming sense of isolation in the workplace, often because they are one of few or the only. We've also learned that women of color face enormous pressure and responsibilities to their families, limiting their career outlook in tech.

There's no denying that women face unique and cumulative challenges in technology. However, in light of our "40 by 22" initiative, NPower has acted to identify and help remove roadblocks preventing career success for young women of color in the tech industry. Today, we've increased the number of young women enrolled in our programs from 25 percent to 30 percent, graduating 95 young women—most of whom are already employed in quality tech jobs. We also added five women to our instructor pool.

While we're on the right path, there is much work ahead—for all of us. Fortunately, we're not alone in our endeavor. Joining in the movement are thoughtful professionals from companies as diverse as World Wide Technology, Citi, Broadridge, Deloitte, KPMG, JPMorgan Chase, Accenture, and BNY Mellon.

Together, we're committed to, inspired by, and advocate for women of color in the tech sector, whether they're pursuing a new career in the industry or working to advance their current career. Ultimately, our goal is to help create a future in the tech sector that cultivates talent and creativity across all demographic groups.

Bertina Ceccarelli joined NPower as CEO in May 2016. NPower is a national nonprofit dedicated to creating pathways to economic prosperity by launching digital careers for military veterans and young adults from underserved communities. Ceccarelli is an engineer by training and began her career in technology as a systems analyst for Procter & Gamble before moving into sales and marketing for the company. She holds an M.B.A. from Harvard University and a B.S. in industrial engineering and operations research from the University of California at Berkeley. ■



# Science

# Life

400  
MORE EXHIBITS

**BEYA  
RECAP**

# CAREER OUTLOOK

## 2019 BEYA STEM Conference

*US Black Engineer & Information Technology* magazine's Career Outlook section is designed to tell you where the jobs are and why you want them. In this issue, we look back at one of the top STEM recruiting events of the year: the 2019 BEYA STEM Conference.

## INSIDE

- > **BEYA Recap**
- > **Top Schools at BEYA**
- > **BEYA Recruiters Directory**



# 2019 BEYA RECAP

**The annual Technology Recognition Luncheon at the BEYA STEM Conference, which honors leaders in modern-day technology, was held Friday, February 8.**

Pharmaceutical company Abbott Laboratories sponsored the event, in addition to Intel; Leidos; SAIC, the scientific research company formerly known as Science Applications International Corporation; World Wide Technology, Inc., a technology service provider co-founded by Black Engineer of the Year David Steward; the U.S. Army; Ernst & Young; and The Boeing Company.

Emceeding the event for the first time was Dr. Robin Coger, chair of the Council of Engineering Deans at Historically Black Colleges and Universities (co-host of the BEYA STEM Conference), and engineering dean of the College of Engineering at North Carolina A&T State University. Dr. Coger's co-emcee was veteran BEYA host Dr. Kendall Harris, provost and vice president for academic affairs at Texas Southern University.

## **STEM education stakeholders increasing the sphere of influence**

### **Preference for diversity**

"We have been doing this quite a while," said Dr. Harris. "Through their

involvement and role modeling, BEYA winners are increasing diversity, equity, and inclusion in STEM and preparing the workforce for the future. Employer commitment to diversity has become a major factor in the selection of organizations that individuals choose to work for."

"This luncheon celebrates the most important aspect of any company is its people," added Dr. Coger. "A nominated employee is already a winner. And if the nomination results in an award, it's yet another win. MITRE recognized this in their article, published a while back: A Case Study in Retention. It acknowledged that MITRE experiences an 80 percent increase in the retention rate in employees who receive recognition. Competing for national recognition benefits companies by demonstrating the outstanding skills and experience of your staff, and it inspires other employees that appreciate their colleagues' accomplishments and experience good feelings about that company. The kind of acknowledgment that takes place at today's Technology Recognition luncheon makes a positive impact

on the culture of the participating organizations that have selected these outstanding men and women who will receive awards."

A year after receiving the Black Engineer of the Year Award, Alicia Boler Davis, former executive vice president for manufacturing at General Motors, was back to deliver the traditional "Pass the Torch" remarks at the BEYA Gala.

"This past year has been a great ride," Boler Davis said.

The 2018 Black Engineer of the Year spoke at the commencement ceremony at Rensselaer Polytechnic, where she earned a master's degree in engineering science and received an honorary doctorate. She also had the honor of speaking to engineering deans and students of historically Black colleges and universities at AMIE's 25th annual conference.

AMIE (Advancing Minorities' Interest in Engineering) is a nonprofit organization whose purpose is to expand alliances to graduate and place underrepresented minority students in engineering careers. "I'm excited to support the efforts of this organization," Boler Davis



# BY THE NUMBERS

Over 33 years, the BEYA Conference has exposed more than **100,000 students** to role models in science, technology, engineering, and math (STEM) careers.



**10,000 men and women** have been nominated for Black Engineer of the Year Awards

**957** have received category awards



**33** have been selected as Black Engineer of the Year

said.

Boler Davis joked that she got succinct advice from her son before speaking at his school commencement ceremony: “Mom, don’t embarrass me!” The audience roared in approval.

“BEYA provides exposure, experience, training, and support to the STEM workforce, which is important in this world of rapidly advancing technology and science,” Boler Davis noted. “I have done everything I can do to advance this cause for women and girls in STEM,” she said, adding that “the BEYA community will have a great example to follow in the 2019 Black Engineer of the Year.”

## An Engineer’s Engineer: Anthony K. Mitchell, 2019 Black Engineer of the Year

Booz Allen Hamilton President and CEO Horacio Rozanski said Mitchell’s legacy is people—his wife, Michelle, his two children, Michael and Martina, eight siblings, and his community. Mitchell, who recently turned 60, is also marking 30 years at Booz Allen.

“Throughout, Tony has stayed relevant, thrived, and contributed,” Rozanski noted. “An engineer’s engineer, he looks at every problem not as an obstacle, but as something he could take apart and put together in ways that worked better than before.”

A senior partner in a firm of thousands of people, Mitchell leads Booz Allen’s justice, homeland security, and transportation business, and has devoted countless hours to mentoring young engineers and people in the community.

The son of a pastor, machinist, woodworker, and electrician, young Tony grew up around the pursuits of his father, and his grandfather’s small garage. Mitchell has eight brothers and sisters, five of whom were in the audience. He described his mother as a stay-at-home mom of nine and a servant leader.

Talking about his path to engineering, he said, “I love automobiles. It was an opportunity to discover engineering and how it is applied to drive products. As an engineer, I challenge you to leave your mark.”

Energized by the stories and accomplishments of people at BEYA, Mitchell said he was proud of the community of Black engineers, which provided a forum to shepherd the next generation.

“As I reflect on the journey and think about what’s to come, what would I tell that 30-something version of myself?” Mitchell asked.

He talked at length about transformational leadership, social and economic challenges, and widespread

problems of anxiety, confusion, fear, anger, and resignation.

“We’re privileged in this room because we understand the science, technology, engineering, and math; we understand the things that bind us together and the responsibilities we have to family members that are not in this room,” Mitchell said.

“Someone sitting in this room will go on to develop software that will cure cancer or develop a vehicle for space exploration, but we need to be the leaders our communities so desperately need,” he said.

Expect more of yourself, the 2019 Black Engineer of the Year advised, as he listed more rules for career journeys.

Develop the capacity, yes, as an engineer, but also as a leader and a productive member of society.

Look inward and ask yourself what things you need to stop doing—what things you need to do to be your best self.

Give more to people who are important to you, whether it’s family, friends, co-workers, or members of the community.

Build institutions and communities, whether it’s a community center, a place of worship, a nonprofit, or a business. Our community and our nation need to rebuild our social values, the 2019 Black Engineer of the Year said. ■



# 2019 BEYA *Top* SCHOOLS

## UNIVERSITY OF MARYLAND, BALTIMORE COUNTY RETAINS NO. 1 SPOT IN USBE'S 200 LIST

In BEYA's annual ranking of colleges with the most students at the 2019 STEM Job Fair and Conference, the University of Maryland, Baltimore County (UMBC) keeps the top spot for the second straight year with 467 students. Of all the colleges and universities ranked, there were more students from the state of Maryland on the list than from any other state. Overall, colleges based in Maryland, Florida, New York, Virginia, New Jersey, and Washington, D.C. ranked highly. To compile the rankings, BEYA looked at conference registration metrics for 2019. More than 50 percent of respondents from these private and public institutions in these states say colleges are doing all they can to help students get to the BEYA STEM Conference. The survey also found that respondents are generally satisfied with the quality of education in their state.

The 2019 BEYA STEM Conference was hosted by Lockheed Martin Corporation, The Council of HBCU Engineering Deans, and *US Black Engineer & Information Technology* magazine. Sponsors were Aerotek and General Dynamics Corporation. The annual conference is produced by Career Communications Group (CCG), which has built lasting partnerships with top companies and government agencies that hire STEM talent at the BEYA Career Fair. Featured employers include Lockheed Martin, Northrop Grumman, AT&T, General Motors, and General Dynamics. ■

## BEYA TOP 50

- |   |   |
|---|---|
| 1. University of Maryland, Baltimore County | 25. The George Washington University    |
| 2. Morgan State University                  | 26. Johns Hopkins University            |
| 3. University of Maryland College Park      | 27. Temple University                   |
| 4. Florida International University         | 28. Delaware State University           |
| 5. The City College of New York             | 29. North Carolina A&T State University |
| 6. Towson University                        | 30. Virginia Union University           |
| 7. Virginia Commonwealth University         | 31. The United States Military Academy  |
| 8. Howard University                        | 32. Norfolk State University            |
| 9. Florida A&M University                   | 33. Tennessee State University          |
| 10. Prairie View A&M University             | 34. Southern University and A&M College |
| 11. New Jersey Institute of Technology      | 35. Xavier University                   |
| 12. University of Maryland Eastern Shore    | 36. University of Kentucky              |
| 13. Virginia State University               | 37. Drexel University                   |
| 14. University of Houston                   | 38. University of Pennsylvania          |
| 15. University of the District of Columbia  | 39. Bowie State University              |
| 16. Jackson State University                | 40. Howard Community College            |
| 17. Tuskegee University                     | 41. SUNY Maritime College               |
| 18. George Mason University                 | 42. Old Dominion University             |
| 19. Montgomery College                      | 43. San Diego State University          |
| 20. Bronx Community College                 | 44. Mississippi State University        |
| 21. Hampton University                      | 45. Lincoln University                  |
| 22. Alabama A&M University                  | 46. Penn State University               |
| 23. University of Virginia                  | 47. Capitol Technology University       |
| 24. Stony Brook University                  | 48. Penn State Harrisburg               |
|   | 49. University of Michigan-Flint        |
|   | 50. University of South Florida         |





# Inspiring & Igniting Innovation NOW!



**GLOBAL LEADERSHIP FORUM**

*Inspiring & Igniting Innovation - NOW!*

## Our Mission

is to unite and empower diverse talent to enable innovation and value creation.

## Our Vision

is to inspire and ignite untapped potential in the global community.

## Core Values

- Commitment
- Courage
- Humility
- Open-mindedness
- Servant Leadership
- Visionary
- Integrity
- Trust



[www.glfnow.org](http://www.glfnow.org)



OUR PARTNERS

INFORMATION TECHNOLOGY  
SENIOR MANAGEMENT FORUM



BE FUTURE READY

**npower**



# 2019 BEYA CAREER FAIR EMPLOYER DIRECTORY

The annual job fair at the BEYA Conference gives science, technology, engineering, and math (STEM) students and professionals a unique opportunity to meet with the largest employers in America. Companies and federal agencies at BEYA, which is traditionally held during Black History Month, are looking for those with skills in bioengineering, AI technology, data systems, and missile systems to join teams that are often spread across the country or in offices around the world. Many employers on the BEYA Career floor have a long history of employing talent at the annual STEM conference. These trailblazing scientists and engineers come back year after year to lead professional development workshops and seminars, provide insight and perspective to prospective hires, and get recognition for world-class inventions and innovations made throughout the year.

**SAVE THE DATE:**  
**34th Annual BEYA STEM Global Competitiveness Conference**  
**February 13-15, 2020**  
**Washington Marriott**  
**Wardman Park, Washington, D.C.**

## Abbott Laboratories

**Website:** <https://www.abbott.com/>  
**Email:** [corpjob@abbott.com](mailto:corpjob@abbott.com)  
**Job Site:** <https://abbott.jobs/>  
**LinkedIn:** <https://www.linkedin.com/company/abbott-jobs/>

Abbott Laboratories has more than 103,000 employees in over 160 countries. It has developmental opportunities for students as well as new graduates. It has a wide variety of open opportunities.

## AEOP Army Education Outreach Program

**Website:** <https://www.usaeop.com/>  
**Email:** [seap@aas-world.org](mailto:seap@aas-world.org)  
**Job Site:** <https://www.usaeop.com/type/apprenticeships/>  
**LinkedIn:** <https://www.linkedin.com/company/usaeop-jobs/>

The Army Educational Outreach Program (AEOP) provides opportunities in science, technology, engineering, and mathematics (STEM). Enrolled students in undergraduate and graduate programs can receive internships, teaching resources, and other experiences.

## Aerotek

**Website:** <https://www.aerotek.com/>  
**Job Site:** <https://jobs.en-au.aerotek.com/>  
**LinkedIn:** <https://www.linkedin.com/company/aerotek-jobs/>

Aerotek serves nearly every major sector/industry with both recruiting and staffing. It places more than 300,000 people annually in over 17,000 companies. The company is active in recruiting new graduates.

## Air Force Civilian Service

**Website:** <https://www.afciviliancareers.com/>  
**Job Site:** <https://www.afciviliancareers.com/careers.php>  
**LinkedIn:** <https://www.linkedin.com/company/air-force-civilian-service/jobs/>

Jobs offered by the U.S. Air Force cover a spectrum of opportunities. Many of the positions are in STEM fields. Some include maintaining global GPS satellites, rocketry, and science research.

## America's Navy

**Website:** <https://www.navy.com/>  
**Job Site:** <https://www.navy.com/joining-the-navy/get-started>  
**LinkedIn:** <https://www.linkedin.com/company/us-navy-jobs/>

The U.S. Navy has a proud tradition of protecting the country while developing Americans to their highest potential. Those with a scientific background are encouraged to apply. Many opportunities exist.

## Apple, Inc.

**Website:** <https://www.apple.com/>  
**Job Site:** <https://www.apple.com/jobs/us/>  
**LinkedIn:** <https://www.linkedin.com/company/apple/jobs/>

One of the unique attributes of Apple as an employer is the benefits it provides. This includes stock grants, education reimbursement, time-away programs, and of course, discounts on Apple products.

## AT&T

**Website:** <https://www.att.com/>  
**Job Site:** <https://www.att.jobs/>  
**LinkedIn:** <https://www.linkedin.com/company/att/jobs/>  
AT&T has expanded in recent years with DirecTV and

Time Warner. The company has world-renowned laboratories that produce scientific innovations and offers numerous internship and enrichment opportunities for students and job applicants.

## BAE Systems

**Website:** <https://www.baesystems.com/en/home>  
**Job Site:** <https://jobs.baesystems.com/global/en>  
**LinkedIn:** <https://www.linkedin.com/company/bae-systems/jobs/>

This company provides solutions for aerospace, land, naval, and security activities. Nearly 90,000 employees work on engineering and manufacturing innovations for defense and security customers. STEM graduates are always needed.

## Battelle Memorial Institute

**Website:** <https://www.battelle.org/>  
**Email:** [recruiting@battelle.org](mailto:recruiting@battelle.org)  
**Job Site:** <https://jobs.battelle.org/>  
**LinkedIn:** <https://www.linkedin.com/company/battelle-jobs/>

Battelle Memorial Institute is a nonprofit built around real-world applications of science and technology. Activities include development, design, and manufacturing. Battelle is a top destination for many scientists and engineers.

## BDPA

**Website:** <https://www.bdpa.org>  
**Job Site:** <https://www.itdiversitycareers.com/>  
**LinkedIn:** <https://www.linkedin.com/company/national-bdpa/jobs/>

The nonprofit BDPA (formerly known as Black Data Processing Associates) is an organization for the advancement of information technology and computer science. Benefits include networking, career enrichment, and peer-to-peer assistance.

## Bell Helicopter Textron Inc.

**Website:** <https://www.bellflight.com/>  
**Job Site:** <https://www.bellflight.com/careers>  
**LinkedIn:** <https://www.linkedin.com/company/bell-flight-jobs/>

This company produces 60 percent of the world's helicopters. Bell has long been at the forefront at innovation from breaking the sound barrier to being aboard NASA's first lunar mission.

## Booz Allen Hamilton

**Website:** <https://www.boozallen.com/>  
**Job Site:** <https://careers.boozallen.com/search>  
**LinkedIn:** <https://www.linkedin.com/company/booz-allen-hamilton/jobs/>

Booz Allen Hamilton is a consulting firm in engineering, technology, and management. Opportunities exist to consult with Fortune 500 companies, nonprofits, and governments. The company's goal is to solve problems.

## Boston Scientific Corporation

**Website:** <http://www.bostonscientific.com>  
**Email:** [GlobalStaffing@bsci.com](mailto:GlobalStaffing@bsci.com)  
**Job Site:** <https://jobs.bostonscientific.com/>  
**LinkedIn:** <https://www.linkedin.com/company/boston-scientific/jobs/>

Boston Scientific takes on the most robust healthcare challenges to find solutions for the most severe medical conditions. The company strives to have a workplace that is inclusive and diverse.



**City of Los Angeles Bureau of Engineering****Website:** <https://eng.lacity.org/>**Job Site:** <https://eng.lacity.org/jobs>**LinkedIn:** <https://www.linkedin.com/company/city-of-los-angeles/jobs>

The Bureau of Engineering is responsible for all aspects of the planning, design, and construction of public works. The projects are endless and include convention centers, parks, and municipal buildings.

**Consumers Energy****Website:** <https://www.consumersenergy.com/>**Email:** [E-Recruiting@cmsenergy.com](mailto:E-Recruiting@cmsenergy.com)**Job Site:** <https://www.consumersenergy.com/company/careers>**LinkedIn:** <https://www.linkedin.com/company/consumersenergy/jobs/>

Consumers Energy provides most of Michigan's energy. The company is serious about serving its customers. Job applicants should be passionate and have a strong understanding of their area of study.

**Corning Incorporated****Website:** <https://www.corning.com/>**Email:** [corningjobs@corning.com](mailto:corningjobs@corning.com)**Job Site:** <https://www.corning.com/worldwide/en/careers.html>**LinkedIn:** <https://www.linkedin.com/company/corning-incorporated/jobs/>

For 167 years, Corning has been the leader in material science. While known for its innovation in glass and ceramics, the company has roots in communications, display technology, and sciences.

**Defense Contract Management Agency****Website:** <https://www.dcmamail.com/>**Email:** [dcmamail.hq.mbx.DCMA-Careers@mail.mil](mailto:dcmamail.hq.mbx.DCMA-Careers@mail.mil)**Job Site:** <https://www.dcmamail.com/Careers/>**LinkedIn:** <https://www.linkedin.com/company/dcmamail/jobs/>

DCMA works in all aspects of interfacing with government contractors. The agency does a myriad of things, including creating contracts, in-plant representatives, and engagement throughout the whole acquisition cycle.

**Deloitte****Website:** <https://www2.deloitte.com>**Job Site:** <https://jobs2.deloitte.com/us/en>**LinkedIn:** <https://www.linkedin.com/company/deloitte/jobs/>

Deloitte provides services to a variety of industries. The company chooses diverse employees with a diverse set of talents and offers opportunities to work in exciting cities in the world.

**Dominion Energy****Website:** <https://www.dominionenergy.com/>**Email:** [hrstaffing@dom.com](mailto:hrstaffing@dom.com)**Job Site:** <https://careers.dominionenergy.com/>**LinkedIn:** <https://www.linkedin.com/company/dominionenergy/jobs/>

Dominion Energy is a leading energy provider in the United States. It has 7.5 million customers in 18 states. Its services include solar, natural gas, and fossil fuel energy production.

**Fannie Mae****Website:** <http://www.fanniemae.com/>**Job Site:** <https://careers.fanniemae.com/main/>**LinkedIn:** <https://www.linkedin.com/showcase/fanniemaejobs/>

Fannie Mae serves as the heart of keeping Americans buying houses. It works to provide high-quality, affordable mortgages in both good and bad times. Many opportunities exist within this organization.

**Federal Reserve Bank of Cleveland****Website:** <https://www.clevelandfed.org/>**Job Site:** <https://www.clevelandfed.org/about-us/careers.aspx>**LinkedIn:** <https://www.linkedin.com/company/federal-reserve-bank-of-cleveland/jobs/>

The Federal Reserve Bank of Cleveland is part of a network of 12 Federal Reserve banks. The system is known as the Federal Reserve, or as the U.S. central bank.

**Ford Motor Company****Website:** <https://www.ford.com/>**Job Site:** <https://corporate.ford.com/careers.html>**LinkedIn:** <https://www.linkedin.com/company/ford-motor-company/jobs/>

Ford is known for its trucks and SUVs. The company is also investing in the autonomous and electric vehicle industries. The company has a variety of positions in any field.

**General Dynamics Corporation****Website:** <https://www.gd.com/>**Job Site:** <https://www.gd.com/careers/job-search>

General Dynamics is a leader in the defense and aerospace industries. It manufactures Gulfstream jets, combat vehicles, and submarines. The company has employees with a range of skills in 45 countries.

**General Motors****Website:** <https://www.gm.com/>**Job Site:** <https://search-careers.gm.com/>**LinkedIn:** <https://www.linkedin.com/company/general-motors/jobs/>

General Motors is a leading vehicle manufacturer. The company is investing in energy efficiency and driver assistance technology and looking to build teams from a range of perspectives and backgrounds.

**Huntington Ingalls Industries****Website:** <https://www.huntingtoningalls.com/>**Email:** [hii-mdis.recruiting@hii-tds.com](mailto:hii-mdis.recruiting@hii-tds.com)**Job Site:** <https://www.huntingtoningalls.com/careers/>**LinkedIn:** <https://www.linkedin.com/company/huntingtoningalls/jobs/>

The largest military shipbuilder in the United States, Huntington Ingalls Industries provides technical solutions to the military, fleet support, and fossil fuel activities. The company has over 40,000 employees.

**IBM Corporation****Website:** <https://www.ibm.com>**Job Site:** <https://www.ibm.com/us-en/employment/>**LinkedIn:** <https://www.linkedin.com/company/ibm/jobs/>

IBM has a history of innovations. Cloud computing is an area the company is investing in heavily. As the largest technology employer, there are always new opportunities for new graduates.

**Intel Corporation****Website:** <https://www.intel.com>**Job Site:** <https://jobs.intel.com/>**LinkedIn:** <https://www.linkedin.com/company/intel-corporation/jobs/>

Intel is famous for its processors. Employees can now engage in areas as varied as 5G, artificial intelligence, and autonomous cars. Graduates in science and technology are encouraged to apply.

**JPMorgan Chase & Co.****Website:** <https://www.jpmorganchase.com/>**Job Site:** <https://jobs.jpmorganchase.com/>**LinkedIn:** <https://www.linkedin.com/company/jpmorgan-chase/jobs/>

For 200 years, JPMorgan Chase & Co has been at the center of the financial world. It provides banking ranging from small checking accounts to innovative financial solutions for billion-dollar companies.

**Kohler Co.****Website:** <http://www.kohlercompany.com/>**Job Site:** <https://www.kohlercompany.com/careers/>**LinkedIn:** <https://www.linkedin.com/company/kohler/jobs/>

Kohler is a leading manufacturer of smart kitchen and bath products. The company also contributes to society with sanitation systems for poor communities and creating beautiful tiles from industrial waste.

**Lawrence Berkeley National Laboratory****Website:** <https://www.lbl.gov/>**Email:** [eeoaa@lbl.gov](mailto:eeoaa@lbl.gov) or [hrsc@lbl.gov](mailto:hrsc@lbl.gov)**Job Site:** <https://lbl.referrals.selectminds.com/>**LinkedIn:** <https://www.linkedin.com/company/lawrence-berkeley-national-laboratory/jobs/>

Berkeley Lab is at the cutting edge of science. Thirteen scientists associated with the laboratory have been awarded the Nobel Prize. Areas of study include computing, biosciences, geology, energy, and physics.

**Leidos****Website:** <https://www.leidos.com/>**Job Site:** <https://careers.leidos.com/>**LinkedIn:** <https://www.linkedin.com/company/leidos/jobs/>

Leidos works in homeland security, healthcare, defense, and intelligence. The company is listed as one of the best employers for veterans. It has 32,000 employees and many opportunities for professional development.

**Lockheed Martin Corporation****Website:** <https://www.lockheedmartin.com/>**Email:** [lmcareers.helpdesk@lmco.com](mailto:lmcareers.helpdesk@lmco.com)**Job Site:** <https://www.lockheedmartinjobs.com/>**LinkedIn:** <https://www.linkedin.com/company/lockheed-martin/jobs/>

Lockheed Martin is a leading defense contractor. Beyond defense contracting, the company is active in the fields of space satellites and space exploration. The company provides many opportunities for employees.

**Los Angeles Department of Public Works****Website:** <http://www.dpw.lacity.org/>**Email:** [eng.boeresumes@lacity.org](mailto:eng.boeresumes@lacity.org)**Job Site:** <https://dpw.lacity.org/jobs>

This organization maintains sewage, drinking water, airports, and flood control operations. The unique location and topography create challenges that require implementation and management of smart technologies and climate change.



## Microsoft

**Website:** <https://www.microsoft.com>

**Job Site:** <https://careers.microsoft.com/us/en>

**LinkedIn:** <https://www.linkedin.com/company/microsoft/jobs/>

Microsoft's operating systems run most computers, and Xbox consoles have tens of millions of gamers. The company is building cloud computing and artificial intelligence. The company has many opportunities for graduates.

## Missile Defense Agency

**Website:** <https://www.mda.mil/>

**Job Site:** [https://www.mda.mil/careers/jobs\\_entry\\_level.html](https://www.mda.mil/careers/jobs_entry_level.html)

**LinkedIn:** <https://www.linkedin.com/company/missile-defense-agency/jobs/>

This U.S. government agency maintains ballistic missiles. The organization is deeply integrated into the military and is vitally important as the first line of defense. Many career opportunities are available.

## NASA

**Website:** <https://www.nasa.gov/>

**Job Site:** <https://nasajobs.nasa.gov/>  
<https://nasai.usajobs.gov/>

**LinkedIn:** <https://www.linkedin.com/company/nasa/jobs/>

NASA has led space exploration for over 50 years. Achievements like the moon landing are now being surpassed by missions to explore Mars. NASA's research spans biology, physics, and geology.

## National Guard Bureau

**Website:** <https://www.nationalguard.mil/>

**Job Site:** <https://jobs.nationalguard.com/ngb/>

**LinkedIn:** <https://www.linkedin.com/company/national-guard-bureau/jobs/>

The Bureau provides support to the Army National Guard and the Air Guard. It is responsible for all 50 states, Puerto Rico, Guam, the Virgin Islands, and the District of Columbia.

## National Oceanic and Atmospheric Administration (NOAA)

**Website:** <https://www.noaa.gov/>

**Job Site:** <https://www.careers.noaa.gov/>

**LinkedIn:** <https://www.linkedin.com/company/noaa/jobs/>

NOAA has the goal of understanding the oceans and atmosphere. The data created help with weather forecasting, sea charts, and guides. Scientists do research that has many real-world applications.

## National Security Agency

**Website:** <https://www.nsa.gov>

**Job Site:** <https://www.intelligencecareers.gov/nsa/index.html>

**LinkedIn:** <https://www.linkedin.com/company/national-security-agency/jobs/>

The NSA leads the fight to protect the cyber infrastructure of the United States. Professionals such as intelligence analysts and cybersecurity experts are a sampling of professions needed to accomplish this task.

## Navy Civilian Careers

**Website:** <https://don.usajobs.gov/>

**Job Site:** <https://www.secnnav.navy.mil/donhr/jobs/>

Jobs in the U.S. Navy can range from zoologist to engineer or physician. Opportunities allow for travel to exciting places. The pay is competitive and provides challenges similar to the private sector.

## New Jersey Institute of Technology

**Website:** <http://www.njit.edu/>

**Email:** [hr@njit.edu](mailto:hr@njit.edu)

**Job Site:** <http://hr.njit.edu/careers>

**LinkedIn:** <https://www.linkedin.com/school/njit/jobs/>

Located in Newark, this institution is a leader in educating students and research innovations. It is a leading institution in awarding engineering degrees. The university also offers opportunities in continuing and professional education.

## Nintendo of America, Inc.

**Website:** <https://www.nintendo.com/corp/index.jsp>

**Job Site:** <https://careers.nintendo.com/>

**LinkedIn:** <https://www.linkedin.com/company/nintendo/jobs/>

Nintendo is a producer of entertainment products. Opportunities range from media production, game development, marketing, and distribution. The company seeks people with innovative ideas. Competition for jobs can be high.

## Northrop Grumman Corporation

**Website:** <http://www.northropgrumman.com>

**Email:** [CareerAdmin@ngc.com](mailto:CareerAdmin@ngc.com)

**Job Site:** <http://www.northropgrumman.com/Careers/Job-Search/Pages/default.aspx>

**LinkedIn:** <https://www.linkedin.com/company/northrop-grumman-corporation/jobs/>

Northrop Grumman is one of the leading defense contractors. Its interests range from cyberspace to outer space, and undersea. The company seeks employees who can engage in a culture of innovation.

## Nucor Steel

**Website:** <http://www.nucorhertford.com/>

**Job Site:** <https://nucor.com/careers/>

**LinkedIn:** <https://www.linkedin.com/company/nucor-corporation/jobs/>

Nucor is one of the largest producers of steel. The company is ranked as one of the best places to work by Forbes. The industry is far more interesting and diverse than you would expect.

## Office of the Director of National Intelligence

**Website:** <https://www.dni.gov/>

**Email:** [RECRUITMENT@DNI.GOV](mailto:RECRUITMENT@DNI.GOV)

**Job Site:** <https://www.dni.gov/index.php/careers/career-opportunities>

**LinkedIn:** <https://www.linkedin.com/company/office-of-the-director-of-national-intelligence/jobs/>

The DNI is central to the management of the intelligence agencies. It oversees a total of 16 agencies. The organization is the principal advisor to the president and the National Security Council.

## Penn State Applied Research Laboratory

**Website:** <https://arl.psu.edu/>

**Email:** [webinquiry@arl.psu.edu](mailto:webinquiry@arl.psu.edu)

**Job Site:** <https://arl.psu.edu/content/employment-o>

**LinkedIn:** <https://www.linkedin.com/company/>

[pennsylvania-state-university-applied-research-laboratory/jobs/](https://www.pennstate.edu/applied-research-laboratory/jobs/)

The APL at Penn State is tightly connected with the Department of Defense. It is classified as an affiliated research center. Much of the research is focused on furthering the goals of the Navy.

## Public Service Enterprise Group (PSEG)

**Website:** <https://www.pseg.com/>

**Job Site:** <https://jobs.pseg.com/>

**LinkedIn:** <https://www.linkedin.com/company/pseg/jobs/>

PSEG provides gas and electric services to customers in New York and New Jersey. The company operates power plants and solar energy facilities. The company has plans to continue to diversify.

## Raytheon Company

**Website:** <https://www.raytheon.com/>

**Job Site:** <https://jobs.raytheon.com/>

**LinkedIn:** <https://www.linkedin.com/company/raytheon/jobs/>

United Technologies Aerospace businesses and Raytheon will combine in a merger. The combination will create a premier systems provider with advanced technologies to address rapidly growing segments of aerospace and defense.

## SAIC

**Website:** <http://www.saic.com/>

**Job Site:** <https://jobs.saic.com/>

**LinkedIn:** <https://www.linkedin.com/company/saicinc/jobs/>

United Technologies Aerospace businesses and Raytheon will combine in a merger. The combination will create a premier systems provider with advanced technologies to address rapidly growing segments of aerospace and defense.

## Sandia National Laboratories

**Website:** <https://www.sandia.gov/>

**Email:** [HR-Records@sandia.gov](mailto:HR-Records@sandia.gov)

**Job Site:** <https://www.sandia.gov/careers/>

**LinkedIn:** <https://www.linkedin.com/company/sandia-national-laboratories/jobs/>

The laboratory focuses on research, including homeland security, nuclear defense, cybersecurity, and biotechnology. Workers can access some of the best facilities. The two main sites are Livermore, CA, and Albuquerque, NM.

## Siemens

**Website:** <http://www.siemens.com/>

**Job Site:** <https://jobs.siemens-info.com/jobs?page=1>

**LinkedIn:** <https://www.linkedin.com/company/siemens/jobs/>

Siemens AG is one of the largest companies in the world. Sectors it is engaged in range from healthcare to wind energy generation. Beyond jobs in technology, opportunities are available in logistics.

## Snap-On Incorporated

**Website:** <https://www.snapon.com/>

**Email:** [corporatestaffing@snapon.com](mailto:corporatestaffing@snapon.com)

**Job Site:** <https://www.snapon.com/EN/Careers>

**LinkedIn:** <https://www.linkedin.com/company/snap-on-inc/jobs/>

Snap-on is a manufacturer of hand tools, power tools, and associated products. The company also engages in



diagnostics and repair services. Customers range from the aerospace, agriculture, and construction industries.

### Southwest Airlines

**Website:** <https://www.southwest.com/>  
**Job Site:** <https://careers.southwestair.com/>  
**LinkedIn:** <https://www.linkedin.com/company/southwest-airlines/jobs/>

Southwest Airlines is the leader in the low-cost airline segment. The airline has employment opportunities, including pilots, marketing, and business management. The company also has extensive needs in technology and analytics.

### Texas Instruments

**Website:** <http://www.ti.com/>  
**Email:** [jobsupportteam@list.ti.com](mailto:jobsupportteam@list.ti.com)  
**Job Site:** <https://careers.ti.com/>  
**LinkedIn:** <https://www.linkedin.com/company/texas-instruments/jobs/>

Texas Instruments' primary business is semiconductors. Its products include digital signal processing, microcontroller semiconductors, and analog technologies. Employees get an opportunity to work with a range of industries.

### The Aerospace Corporation

**Website:** <https://aerospace.org/>  
**Job Site:** <https://aerospace.org/careers>  
**LinkedIn:** <https://www.linkedin.com/company/the-aerospace-corporation/jobs/>

The Aerospace Corporation has provided research, development, and consulting services to the federal government since the 1960s. It supports the Air Force, the National Reconnaissance Office, NASA, and NOAA, among others.

### The Boeing Company

**Website:** <https://www.boeing.com/>  
**Job Site:** <https://jobs.boeing.com/>  
**LinkedIn:** <https://www.linkedin.com/company/boeing/jobs>

Boeing builds jets, space security systems, and defense projects. The company is the leader in its various fields. The company has active programs to attract African-American and Latino talent.

### The Johns Hopkins University Applied Physics Laboratory

**Website:** <https://www.jhuapl.edu/>  
**Job Site:** <https://www.jhuapl.edu/Careers>  
**LinkedIn:** <https://www.linkedin.com/company/johns-hopkins-university-applied-physics-laboratory/jobs/>

The Johns Hopkins Applied Physics Laboratory is associated with the world-leading Johns Hopkins University. The laboratory is focused on solving questions. Researchers gain experience working with colleagues in the highest-quality facilities.

### The MITRE Corporation

**Website:** <https://www.mitre.org/>  
**Email:** [recruitinghelp@mitre.org](mailto:recruitinghelp@mitre.org)  
**Job Site:** <https://mitre.referrals.selectminds.com/>  
**LinkedIn:** <https://www.linkedin.com/company/mitre/jobs/>

MITRE Corporation's areas of business include homeland security, judiciary, defense, and cybersecurity. The company has several research centers on behalf of the federal government. The company has a team-oriented culture.

### U.S. Air Force Civilian Service

**Website:** <https://www.afciviliancareers.com/>  
**Job Site:** <https://www.afciviliancareers.com/careers.php>  
**LinkedIn:** <https://www.linkedin.com/company/air-force-civilian-service/jobs/>

Jobs offered by the Air Force cover a wide spectrum. Many of the positions needed to be filled are in STEM. Some examples include maintaining global GPS satellites, rocketry, and research.

### U.S. Army Combat Capabilities Development Command

#### U.S. Army RDECOM

**Website:** <https://www.army.mil/ccdc>  
**Email:** [usarmy.ecbc.applications@mail.mil](mailto:usarmy.ecbc.applications@mail.mil)  
**Job Site:** <https://www.ecbc.army.mil/careers/>  
**LinkedIn:** <https://www.linkedin.com/company/usarmyccdc/jobs/>

This organization is under the Futures Command. The focus is on scientific research that benefits the mission of the U.S. Army. The organization oversees one laboratory and six research centers.

### U.S. Army Corps of Engineers

**Website:** <https://www.usace.army.mil/>  
**Email:** [HRInquiries@usace.army.mil](mailto:HRInquiries@usace.army.mil)  
**Job Site:** <https://careers.usace.army.mil/>  
**LinkedIn:** <https://www.linkedin.com/company/us-army-corps-of-engineers/jobs/>

This organization is comprised of military and civilian personnel. The organization engages in some of the largest public works. It is known for working to mitigate the risk of natural disasters.

### U.S. Army Test & Evaluation Command

**Website:** <https://www.atec.army.mil/>  
**Job Site:** <https://www.atec.army.mil/employment.html>  
**LinkedIn:** <https://www.linkedin.com/company/u-s-army-test-and-evaluation-command/jobs/>

ATEC tests the battle worthiness of military equipment. The organization tests for all branches of the military. Test centers include Aberdeen Proving Ground, White Sands Missile Range, and Yuma Proving Ground.

### U.S. Coast Guard

**Website:** <https://www.uscg.mil/>  
**Email:** [civjobs@uscg.mil](mailto:civjobs@uscg.mil)  
**Job Site:** <https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Human-Resources-CG-1-/Civilian-Human-Resources-Diversity-and-Leadership-Directorate-CG-12/Office-of-Civilian-Human-Resources-CG-121/CivilianCareer/careeropp/>  
**LinkedIn:** <https://www.linkedin.com/company/u.s.-coast-guard/jobs/>

The Coast Guard protects the country's economic interests, environment, and public. A variety of civilian support functions are required. The jobs offered by the Coast Guard are some of the most diverse.

### U.S. Intelligence Community

**Website:** <https://www.intelligence.gov/>  
**Email:** [help@IntelligenceCareers.gov](mailto:help@IntelligenceCareers.gov)  
**Job Site:** <https://www.intelligence.gov/careers>

This is not an organization, but more of a hub for applications.

### U.S. Marine Corps

**Website:** <https://www.marines.com/>  
**LinkedIn:** <https://www.linkedin.com/company/us-marine-corps/jobs/>

The Marine Corps has extensive needs for civilian workers. As some of the first deployed in combat zones, the Marines utilize more technology and engineering solutions to accomplish their goals.

### United Technologies Corporation

**Website:** <https://www.utc.com/>  
**Email:** [utcrecruiting@utc.com](mailto:utcrecruiting@utc.com)  
**Job Site:** <https://jobs.utc.com/>  
**LinkedIn:** <https://www.linkedin.com/company/united-technologies/jobs/>

Raytheon and United Technologies Aerospace Businesses will combine in a merger. The combination will create a premier systems provider with advanced technologies to address rapidly growing segments of aerospace and defense.

### UPS

**Website:** <https://www.ups.com>  
**Job Site:** <https://www.jobs-ups.com>  
**LinkedIn:** <https://www.linkedin.com/company/ups/jobs/>  
 United Parcel Service is the world's logistics leader. Its solutions include package transportation, freight, customs, and technologies to facilitate global supply chains. The company offers employment opportunities in 220 countries.

### USAA

**Website:** <https://www.usaa.com/>  
**Email:** [HumanResources@usaa.com](mailto:HumanResources@usaa.com)  
**Job Site:** <https://www.usaaajobs.com/>  
**LinkedIn:** <https://www.linkedin.com/company/usaa/jobs/>

USAA offers a variety of financial services for the U.S. military and military families. The company serves 11 million members. The company offers insurance, financial planning, and diversified financial services.

### World Wide Technology

**Website:** <https://www.wwt.com/>  
**Job Site:** <https://www.wwt.com/careers/>  
**LinkedIn:** <https://www.linkedin.com/company/world-wide-technology/jobs/>

World Wide Technology is one of the largest companies in the United States. Fortune magazine has recognized it as one of the best places to work. Glassdoor has also included it on a list.

**For more stories and info like this,  
 Visit us online at  
<http://www.blackengineer.com>**





AFRL in-house manufactured integrated circuit.

Come join the Air Force Research  
Laboratory (AFRL) team  
where diversity in talent, background,  
ideas and beliefs allows us to create  
tomorrow's technologies today...

# IMAGINE THE IMPOSSIBLE POSSIBLE

AFRL offers civilian career opportunities in engineering, math, science and medical disciplines.

[www.TeamAFRL.com](http://www.TeamAFRL.com)



[www.USAJOB.gov](http://www.USAJOB.gov)





## **THANKS FOR MAKING DREAMS STRONGER**

General Motors is proud to partner with Historically Black Colleges and Universities to support diversity in STEM. As a top 10 supporter, it's a privilege to work with your engineering deans, faculty and students.

---

**G E N E R A L   M O T O R S**



# Defining tomorrow with today's leaders.



At Lockheed Martin, inclusion drives success. We are proud to be named the lead Top Corporate Supporter of Historically Black Colleges and Universities (HBCUs) Engineering Programs for the fifth year in a row. Diverse backgrounds, experiences and points of view help us create incredible work, solve customers' toughest challenges and engineer solutions around the world. We don't know what's going to change the world next. But we're probably already working on it. Learn more at [lockheedmartin.com/diversity](https://lockheedmartin.com/diversity)

Lockheed Martin. Your Mission is Ours.™

