

illuminator

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GIVE TO MAKE

A message from Dean Stephanie Adams

When I joined Old Dominion University almost two and a half years ago, I set a goal to open a Makerspace in the college. We have just come another step closer to realizing this dream. In 2017, we were given roughly 7,000 sq. ft. of space on the second floor of Monarch Hall (former education building) to house our Makerspace and just recently we received a challenge grant. A generous benefactor is willing to give us \$500,000 once we raise \$250,000. I am asking for your help in reaching this goal, by supporting our Give to Make Campaign.

The link for you to make your gift is:
tinyurl.com/bcet-makerspace

Let me briefly describe what a Makerspace is and how it will benefit our engineering students. Makerspaces are physical spaces that allow students to exercise their ingenuity and imagination in designing and creating objects; to offer a pedagogical approach that provides students an opportunity to learn by doing outside of the traditional classroom. They allow us to transform engineering education by developing

students that are more hands-on, more innovative, and more prepared to solve the complex

"As a child, I was always the type to take various household items apart and reassemble them until they would work. My curiosity and passion for tinkering carried into high school, where I was given a modest outlet to explore my interests. Now that I am in college, I am ready to build bigger scale projects and would love access not only to machinery, but the resources and guidance to develop and apply my engineering skills in a hands-on learning environment. I cannot wait to have a Makerspace!"

~ MYSTIQUE OWENS

Senior, Mechanical & Aerospace Engineering
Makerspace Student leader



problems facing industry and society. They are typically equipped with technologies such as 3D printers, laser cutters, CNC Routers, water cutters, and traditional tools such as, hand tools, drills, saws, welders, etc., to facilitate woodworking, electronics and metalworking. A Makerspace can also enhance the industry-student relationship and serve as a vehicle for students partnering with industry by working on industry sponsored projects.

As an engineer, I hope you can appreciate that creativity, invention, and innovation are central pillars of a 21st-century engineering education. The Makerspace will allow us to push the boundaries of innovation, solve the problems of the day,

create jobs of the future and have a direct and positive impact on the industries our students and faculty serve.

GIVE NOW
ODU MAKERSPACE

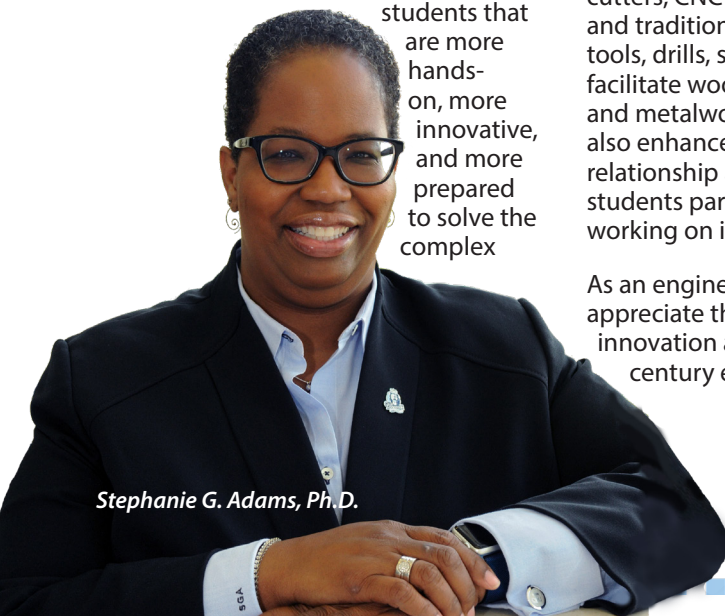
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Stephanie G. Adams, Ph.D.



STUDENT SPOTLIGHT: BONNIE LEE MILEY

Navy vet, computer engineering senior, wins SoldierStrong Scholarship

story by Keith Pierce

video by Keith Pierce and Sarah Considine

Short on money, Bonnie Lee Miley left college and enlisted in the Navy in 1984. She served on active duty for six years as a cryptologic technician, a national intelligence-gathering position. After her honorable discharge, Miley was called back to active duty to provide support in a high-profile assignment at the Pentagon during Desert Shield and Desert Storm operations.

"I can't really talk about a lot of what I did at the Pentagon, but I was recalled because of my skillset in telecommunications," said Miley, now a senior majoring in computer engineering at Old Dominion University. "My biggest concern was my daughter. She was 3 and I had to sign custody away to my parents."

Miley later returned to her civilian work as an engineer for a private company. Miley, who still works professionally, is pursuing a degree to "finish what she started."

A student in the Batten College of Engineering and Technology, Miley is a member of the Engineering Ambassadors program, where she helps promote the college and conducts campus and lab tours. She also mentors other engineering students.

"The truth is, I mentor younger students because whether they know it or not,



Bonnie Lee Miley then and now

I'm learning more from them than I could ever teach them," Miley said. "But it is my hope that my background as a professional engineer inspires younger students to never give up."

Until she received a call from Anthony Dean, associate dean for research in the Batten College of Engineering and Technology, Miley was unaware of the \$2,500-per-semester SoldierStrong scholarship, which is renewable for up to \$5,000 per academic year.

"When I received the call from Dr. Dean,

I was humbled," Miley said. "On this campus, if you open your eyes and listen, there are so many people willing to make the effort to help you succeed. Dr. Dean is one of those people."

The scholarship also has been renewed for last year's recipient, Stephanie Primeaux, who is also a Navy veteran. Primeaux is a senior majoring in mechanical and aerospace engineering, as well as a part-time NASA intern and a mother of two.

"The SoldierScholar program is aimed at giving back to our veterans by helping them achieve their goals of higher education. To date, this important program has raised more than \$500,000," said Chris Meek, co-founder and chairman of SoldierStrong. "We are proud of our service members and consider it a privilege to support those who have served and sacrificed for us take their next steps forward in life."



ENGINEERING AMBASSADORS

ODU engineering ambassadors now a fully recognized student organization

by Andrea Luna

It's official. The Engineering Ambassador program (EA) in the Batten College of Engineering and Technology is now a fully recognized student organization at Old Dominion University. And thanks to recent training directed by the Engineering Ambassador Program at Penn State University, the program is also now part of the Engineering Ambassador Network (EAN), a collaboration of engineering students across universities around the world dedicated to promoting engineering to middle and high school students.

The Engineering Ambassador program, which began in fall 2016 as a vision of Stephanie Adams, Ph.D., dean of the Batten College of Engineering and Technology, along with Associate Dean Rafael Landaeta and Bonita Anthony, director of Engineering Student Success, seeks to enhance leadership development and foster a spirit of pride among students within the college and ODU community. The mission of EA is to provide insight to potential students about what the University has to offer, as well as to support, coordinate and conduct college recruitment and retention programs.

"Engineering Ambassadors make engineering known," said Abbie Dean, president of EA. "As an engineering ambassador, you utilize the skills you have developed in the classroom to shed light on the amazing world of engineering and the endless opportunities being an engineer can give you."



photo by Andrea Luna

Engineering Ambassadors Council - Front row, left to right: **Thomas Hogan, Ashley McIntosh, Abbie Dean, Bonnie Lee Miley, Danielle Carter, Phil Leonard and Robert 'Bob' Gonzalez.** Back row from left to right: **Niko Ambrose, Mystique Owens and Westin Messer.** Not pictured: **Mario Brown and Linel Thompson.**

Dean Adams invested in the concept by recruiting self-motivated volunteers who take initiative, set a positive example and understand the importance of displaying professionalism and tact while representing the College at internal and external events. Since its induction, ambassadors have impacted more than 10,000 people, including K-12 students, parents, research partners and high school counselors and teachers.

Engineering ambassadors are trained in tour techniques and knowledge about the University and must maintain a 3.0 GPA. Ambassadors are a mix of undergraduate and graduate students. More than half of this year's team is part of a minority group and 44% are women. Ambassador membership has increased

by more than 50% this year compared to previous years.

"The dean's student ambassador program has been instrumental in the development, retention and recruitment of ODU students," said Landaeta, EA advisor. "Since its inception, The College of Engineering and Technology has seen a significant increase in enrollment and applicants. The EA is one of many strategic initiatives we have embarked on to retain and recruit students, while promoting professional development by connecting ambassadors to industry representatives in the Hampton Roads community."

GRADUATE SPOTLIGHT: CHRISTINE ODENWALD

Virtual is her reality

story by Keith Pierce

video by ODU Strategic Communications & Marketing

For Christine Odenwald virtual is reality. The Old Dominion University senior is graduating in December 2018 with a bachelor's degree in Modeling, Simulation and Visualization Engineering. The Chesapeake, Virginia native has worked on several projects related to virtual reality or augmented reality as a NASA Langley Research Center intern. Her work helped shape a visualization that produced an astronaut's-eye-view of a Langley science instrument mounted on the International Space Station. With a virtual reality headset, viewers could see the SAGE III (Stratospheric Aerosol Gas Experiment III) instrument as if they were taking an adventurous spacewalk outside the station.

Growing up, Christine was interested in mathematics and thought she was going to follow in the footsteps of her grandparents and become a teacher. Her older brother, on the other hand, dreamed of being an engineer. In high

school, both she and her brother took part in Virginia Space Coast Scholars, a summer space program sponsored by the Virginia Space Grant Consortium, where they were tasked with designing space missions and figuring out the science and engineering behind those missions. That experience changed everything.

"We kind of flipped," Christine said. "I'm the engineering major interning at NASA and he teaches math in Roanoke. I think we both kind of inspired each other."

Christine is also currently an operational test engineer at Booz Allen Hamilton in Norfolk. Upon graduation, she looks forward to taking her engineering career to new heights.



Hear more in this brief video:



tinyurl.com/ChristineMSVE

Photo credits: NASA/David C. Bowman

HAPPY HOLIDAYS

from the



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- Stephanie Adams, Ph. D., dean
- Keith Pierce, APR, director of communications and marketing

1105 Engineering Systems Building
Norfolk, VA 23529
(757) 683-3789 (office)
(757) 683-4898 (fax)
engineer@odu.edu

