ALUMNI SPOTLIGHT

ARMY EDUCATIONAL OUTREACH PROGRAM

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February 2017

DARAIUS

GEMS ALUMNI

Designing a robot for the 2017 FIRST Robotics Competition

WORDS OF ADVICE

Do not hesitate to enroll in an AEOP program. It will give you a different perspective on learning and applying what you know, and it will connect you with like-minded people and great mentors. It can also help you decide if a STEM field is the right fit for you.

> I have decided I want to become an engineer and develop solutions that will improve lives and communities around the world.

BEST THINGS ABOUT THE PROGRAM

GEMS was my first STEM opportunity outside of school, allowing me to build on my high school robotics experience and skills. The engineering sessions at GEMS are about applying everything you know to a problem, finding out what else you need to know, and then designing, prototyping and building a solution. The program gave me valuable opportunities to problem-solve around real-world problems, whether it was cleaning up following a natural disaster or building a solar vehicle. GEMS exposed me to great teammates and mentors who encouraged me to take risks and take a leadership role.

AS A RESULT OF THE PROGRAM

I realized that I love to design things and see them become a reality. GEMS also reaffirmed my appreciation for teamwork to assess problems and the application of technology to create useful solutions. Last summer, I was able to apply this approach as an intern at a technology hub Gearbox, in Kenya. There, I assisted engineers designing an affordable method for prototyping and manufacturing Printed Circuit Boards. During this experience, I also witnessed community-based initiatives to create affordable water pumps. I have decided I want to become an engineer and develop solutions that will improve lives and communities around the world.

HOW PARTICIPATING IN AEOP INSPIRED YOU TO ADVANCE IN STEM

GEMS inspired me to look for more STEM opportunities outside of school. As a result, I attended NASA's Virginia Space Grant Consortium Summer Academies (2015, 2016) where scholars designed a manned mission to Mars, with experts at NASA's Langley Research Center. I designed the first nuclear propulsion system approved at the academy.

I also now provide design and building services to Digital Design and Imaging Service, which uses a series of aerostats deployed 200 to 1,000 feet above the Earth, providing crowd counting, infrastructure planning and other services.

Each month AEOP features one of our program participants and future STEM leaders. Read what these alumni have learned and what they are up to now. If you're an AEOP alumni and want to tell your story visit us here: **www.surveymonkey.com/r/AEOPAlumniSpotlight**