

# STEM SPOTLIGHT

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#### **HOW DID YOU SELECT YOUR COLLEGE MAJOR?**

Yes, University of Memphis (Bachelor) and Texas A&M University (Master's). Growing up I always had a curious mind and loved thinking of ways to solve problems or making something work better. My father was a big influence towards this end because he was always pointing out aspects of the built environment and how we interfaced with the functionality of the devices or machines. We would also talk about how such a device came to being (e.g., the traffic signal). I had a propensity for math, as well, which supported entering the engineering field, which is math-heavy.



#### WHAT WAS THE BIGGEST INFLUENCE IN YOUR SELECTION OF MAJOR/CAREER?

My desire to help solve problems and make things work better was the greatest influence. However, when I was a freshman, I switched from Mechanical to Civil because I felt the concepts and processes were more "tangible" and relatable.

IF YOU COULD GO BACK TO HIGH SCHOOL AND SELECT ANY ELECTIVE COURSE TO TAKE THAT WOULD HAVE BETTER PREPARED YOU FOR COLLEGE, WHAT WOULD IT BE?

If I could go back and take an elective course, I think it would be Economics. Economics is foundational to so many aspects of society, and an understanding of these concepts would have better prepared me for some subjects I encountered in college.

#### WHAT IS YOUR FAVORITE ASPECT OF YOUR JOB?

Every single day I get to support an organization whose mission is to provide natural resource management assistance to communities throughout our district's region focused on taking care of people and the environment. Our district's primary focus is the Mississippi River and its tributaries, and I believe the Mississippi river is one of our nation's greatest assets and richest treasures. The Memphis district is focused on flood risk management, ecosystem restoration, and riverine navigation. We help protect hundreds of thousands of people up and down the river allowing them to live, work, and play in the cities and states bordering the river. We help keep commerce and commodities moving for a transportation artery which not only affects farmers regionally and nationally in the United States, but 60% of the world's food travels along the Mississippi River.

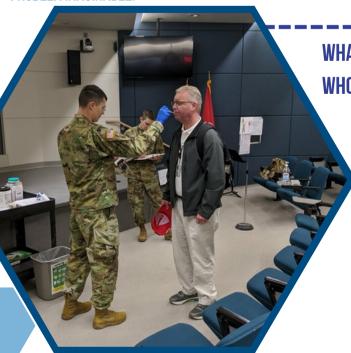
### HOW DO YOU/YOUR COMPANY MAKE A POSITIVE IMPACT ON SOCIETY/OUR COMMUNITY?

Every day we're taking care of people one way or another. Flood risk management provides essential protection helping avoid consequences from flooding disasters (for every \$1 invested in the program, \$125 in damages is avoided); ecological restoration helps floodplains, forests, and habitats remain functional and thriving; riverine navigation allows barges to continue shipping up and down the river thereby reducing the number of tractor trailers on the highways by the tens of thousands. The barge traffic and reduce tractor trailers also provides safer roads, a healthier environment with less exhaust, and helps keep the cost of groceries as low as possible by providing a larger-scale alternative to trucking. Additionally, the Corps of Engineers helps solve our nation's toughest engineering challenges, including: pandemic response, climate change, saltwater intrusion from the Gulf of Mexico, groundwater depletion alternatives, coastal resiliency planning, lock and dam management, and on and on.



#### WHAT IS THE MOST INTERESTING THING YOU HAVE BEEN ABLE TO DO IN YOUR CAREER?

As part of the President's directive to the Corps of Engineers in response to the COVID pandemic and the impending ICU bed shortage in hospitals, I was deployed to Wisconsin to help build Alternate Care Facilities (ACFs). This was one of the greatest opportunities in my life. I was part of a mission that was tasked with collaborating with 30+ other local, state, and federal agencies to develop solutions to help meet the needs of patients who were dying daily as a result of the inability of hospitals to provide the level of care necessary. Working with hundreds of volunteers from other agencies plus a large contingent of the national guard, we were able to assess, delineate, communicate, develop, and construct field hospital-type facilities in a matter of days for situations that would typically take years. And we were all working at the risk of catching this deadly disease and losing our lives. I witnessed the most incredible things during this mission that will likely never happen again because of the unique environment in which our nation found itself. The Corps of Engineers can SOLVE ANY PROBLEM IMAGINABLE.



## WHAT ADVICE WOULD YOU LIKE TO SHARE WITH K-12 STUDENTS WHO ARE CONSIDERING YOUR PROFESSION?

Stay curious and ask a lot of questions throughout your life starting when you're very young. Remain open to exploring possibilities and opportunities that come up every single day. Take chances and step out trying new things. Lastly, know that there is no such thing as failure - you can only learn from every single endeavor. You only succeed or learn, and every single entrepreneur, inventor, coach, teacher, and employee will tell you the same thing. Mistakes are stepping stones to success.

