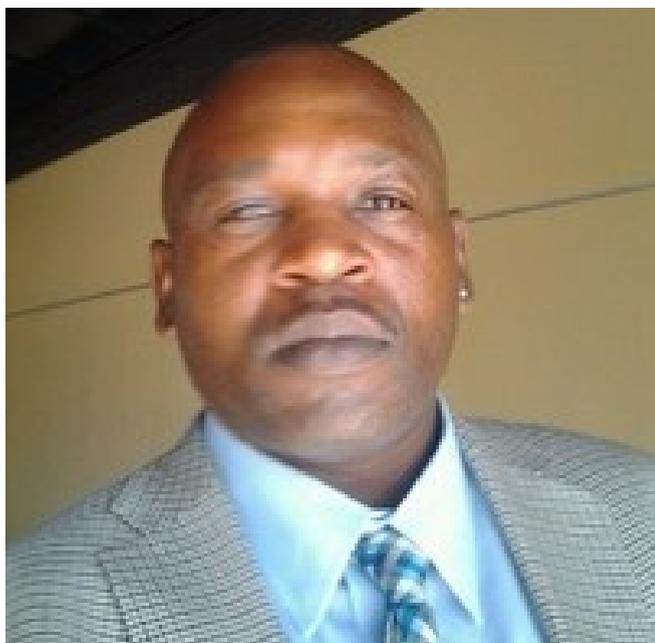




BLACK HISTORY MONTH NATIONAL ENGINEER WEEK



Demetrius Gaines

Demetrius Gaines is an electrical engineer with an Associate Degree in Electronic Engineering, a Bachelor's Degree in Biomedical Electronics Engineering and a M.B.A. in Project Management. He joined the USIBWC in March of 2017 as the Electrical Engineer for Amistad Dam in Del Rio, TX.

Mr. Gaines began working in the electronics industry in the late 1980's and has served in two branches of the United States Military (U.S. Army and U.S. Navy). As an Electrical Engineer, he supports the USIBWC mission by ensuring that the Generators are mechanically sound to provide electricity through the use of water releases through the turbine shafts.

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He loves being an engineer at USIBWC because it gives him the opportunity to step out of his comfort zone of working with just a few Watts of power to being comfortable with working with millions of Watts of power. (Our generators produce 33 million watts of power each, and we have two generators.) He shared that the most challenging aspect of his job is the relationship of how the water pressure, mechanical components works together. If there is a failure in any one of these vital components there would be no way to produce electricity.

Growing up he was introduced to Lewis Latimer (Developed the filament that allows the light bulb to work) and Garret Morgan (developed the gas mask, and the traffic light). Then he was introduced to Nikola Tesla (the father of Alternating Current Electricity) he was the first to build a radio, remote control boats and the electric car. These men who developed products that made daily live easier and safer and I wanted to be able to contribute something that would do the same, also inspire him.

During Black History Month we reflect on the people that inspired us the most. For Mr. Gaines the individuals that inspired him the most were Frederick Douglass and Benjamin Banneker. Both men were born into the corrupt evil system of chattel slavery and despite all of those obstacles they dedicated themselves to self-improvement and the elevation of their communities.

Mr. Gaines advices those young people who might be interested in pursuing a career in STEM to NEVER GIVE UP and be strong in your convictions. The only limitations that can stop you are the limitations you place on yourself. If you believe that you can do it, then no obstacle that presents itself can stop you. Plus, a vivid imagination can lead to a good idea that will lead to a potentially great advancement for society as a whole. Light Bulb, Radio, Cell Phones.

During his time off Mr. Gaines has developed several electronic devices for weight-loss enhanced learning. He holds a pending patent for electronic subliminal learning.