

# GEOFORCE MONTHLY

Changing lives since 2005



Shukuru Makanyaga scanning a geophysical log at his office in the Bureau of Economic Geology at The University of Texas at Austin.

## ALUMNI SPOTLIGHT: SHUKURU MAKANYAGA

In the summer of 2011, Shukuru Makanyaga was on his third GeoFORCE academy trip—this one to the beautiful Pacific Northwest where he learned about plate tectonics and geologic hazards under GeoFORCE instructor, [Dr. Jeffrey Paine](#), a Senior Research Scientist at The University of Texas at Austin's Bureau of Economic Geology. Eight years later, Makanyaga sat across the table from Dr. Paine in an interview at the Bureau.

Makanyaga was a GeoFORCE student from 2009 – 2012. It was through his academy trips that he discovered a love for geology, especially as it pertains to the oil and gas industry. Throughout his years at Texas A&M University, he continued pursuing information about the oil and gas field as an active member of the Society of Petroleum Geologists, the Society of Petroleum Engineers, and the American Association of Drilling Engineers.

Upon graduating with a Bachelor of Science in Geology in December of 2017, Makanyaga worked as a wellsite geologist for Impac Exploration Services, where he spent two years at drilling sites all over west Texas and southeast New Mexico. In late 2019, he sought out a more stable job and was thrilled to get an interview at the Bureau of Economic Geology.

“GeoFORCE is primarily responsible for why I’m doing what I’m doing today,” Makanyaga told me as we chatted in the GeoFORCE suite—a floor up from his brand new office. “It introduced me to the field as a 14-year-old. It helped me decide what I wanted to study. I will always remember what GeoFORCE did for me.”

Makanyaga is now a Research Engineer & Geologist for the Bureau. He is currently working on a project funded by the Texas Railroad Commission to analyze well logs. This data will be inputted into software used by oil companies to make informed decisions on what counties to begin surface-casing in for future drilling projects. In the future, he’d love to work with a variety of Bureau staff and even do some outreach. He hopes to one day get a master’s degree in geology under the tutelage of one of his colleagues at the Bureau. As Makanyaga said, “I’m excited for the different avenues I can take.”

GeoFORCE Texas is an outreach program through The University of Texas at Austin's Jackson School of Geosciences that introduces high school students from underserved communities to STEM and geoscience careers through summer field experiences, corporate mentoring, and college guidance. In 2015, our program was honored with the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring--the highest such honor from the United States government. More information can be found on our website at <https://www.jsg.utexas.edu/geoforce/>.



Victoria Michael (L) and GeoFORCE alumnus Daniel Campos (R) presenting in a college panel to AVID scholars from McCallum High School.

## UPCOMING EVENTS & OPPORTUNITIES

3/20

- Austin Teacher Externship: Study Earth Science in Columbia, Application Deadline

3/25

- University of Texas Co-op Mitchell Scholarship, Deadline

4/15

- AGU Bridge Program, Student Application Deadline

## FLASH SPOTLIGHT: THOMAS QUINTERO

GeoFORCE alumnus, former counselor, and Jackson School student Thomas Quintero created a fun video entitled "Knox Rocks" for the 2020 Texas Research Showdown based on his paper: "Cementation of Solution-Collapse Breccia in the Lower Ordovician Upper Knox Group, Central Tennessee."

Watch this short video to support his amazing research:

<https://www.youtube.com/watch?v=ctKir219hZ4>

## BROADER IMPACTS IN K-12: OUTREACH WITH AVID SCHOLARS

The fight for diversity in higher education, and especially in the field of geoscience, is a never-ending one. Most recently, Dr. Leah Turner, Program Director of GeoSTEM, collaborated with Jeff Jones of UT's Division of Diversity and Community Engagement to host a panel and lab tour for AVID scholars at the Jackson School of Geosciences. AVID (Advancement Via Individual Determination) is a nonprofit focused on shifting curriculum to student-centered learning. AVID coordinators work with 80,000 educators each year to prepare *all* students for college and their future careers.

On January 28th, a group of 9th graders from Austin's McCallum High School arrived at the Jackson Geological Sciences Building for a presentation on Earth science and geoscience careers followed by a panel discussing common misconceptions about university life. GeoFORCE alumnus Daniel Campos told the students about his initial struggle in college and his eventual acceptance as a PhD student at the Jackson School. Victoria Michael talked about being an education and biology double-major, and her plans to apply to med school.

Both Campos and Michael talked about being a diverse student on campus, sometimes the only student of color in their classes, and resources such as UT's Multicultural Student Center that helped mitigate their feelings of isolation.


After the panel, the AVID scholars were given a tour of Dr. Nicola Tisato's rock physics lab to broaden the students' understanding of geology and geoscience research. We believe this familiarity will encourage some of these students to apply for the Jackson School in a few years, but the primary goal was to simply leave them all believing that they can go to college. There is a world of opportunity out there for these students and we hope we did our part in introducing some of it to them.



AVID scholars in a tour of Dr. Nicola Tisato's lab.

**GEOFORCE**  
TEXAS  
JACKSON SCHOOL OF GEOSCIENCES

 @GeoFORCETexas

 @geoforce\_texas

Questions or comments? Email us at [geoforce@jsg.utexas.edu](mailto:geoforce@jsg.utexas.edu)