



NASA WEST VIRGINIA SPACE GRANT CONSORTIUM SUMMER 2022 HIGHLIGHTS



Greetings All! Welcome to the 2022-2023 academic year. Our Space Grant office had a wonderful, fun-filled summer and took the opportunity to support numerous community events this summer. We also had the chance to attend specific meetings and conferences to enhance our skills, knowledge, perception, and understanding of how to broaden our impact to serve students and educators across West Virginia better this fall. We have outlined many of the summer activities here:

June 12– June 17, 2022

Hack Week

NASA WV EPSCoR and the NASA WV Space Grant office hosted an inaugural hack week to collaborate on issues of machine learning and artificial intelligence in spacecrafts. The purpose was to contribute to solving the grant problem: Fault Diagnosis for Safety-Critical Autonomous Systems using Reinforcement Learning. NASA professionals and Institutions from Delaware, New Jersey, Virginia and West Virginia worked together at WVU to understand and improve issues NASA is currently facing in creating autonomous systems using artificial intelligence on spacecraft systems. The event began with a welcome to WV dinner at the WVU Alumni Center. Participants lodged in the dormitories at Lincoln Hall and the rigorous, engaging work began promptly every morning following breakfast. The class took place in the space donated by the Benjamin Statler College of Engineering & Mineral Resources building. Dr. Evana Gizzi, tech lead at NASA, said the students learned how to code in Python, the basics of artificial intelligence, specifics on artificial intelligence projects at NASA and they built their own neuro network from scratch. Dr. James Harrington, NASA Computer Scientist and WVU Project Manager was in attendance and reminded us all that “Data science is becoming central to the modern world. Data science has experienced 650% job growth since 2012 and recent job reports show that seven out of the 10 fastest growing careers are data centric. Engaging students in using data to address scientific questions has long been an integral aspect of science education, which is the key factor to manage NASA Mission research.” says Harrington. During the down time some students took advantage of the swimming pool and workout facility at the WVU Rec center and others created lasting relationships while enjoying putt-putt golf and hiking in Morgantown!



Dr. Evana Gizzi introduces hack week



Hack week welcome dinner



Dr. Mehta and grad student Lunet Yifru answer media questions



Taking a hack break

June 18, 2022

NASA WV SGC Participates in Juneteenth Jubilee

The issue of General Order No. 3 by Union troops on June 19, 1865, marked the official end of slavery in Texas and the U.S. On that Monday, enslaved African Americans in Texas learned of their freedom. That day of liberation became known as Juneteenth, when the Emancipation Proclamation was announced by Union troops in Galveston, Texas. On Thursday, June 17, 2021, President Joe Biden signed into law legislation making Juneteenth a federal holiday.

NASA Administrator Bill Nelson said in this year's Juneteenth Workforce Message:

"Last year, President Biden signed legislation into law that established June 19 as Juneteenth National Independence Day a federal holiday. On this day, we reckon with the moral stain of slavery on our country. We reflect on centuries of racial injustice, inequality, and struggle that unfortunately still exist today. There is still more work to do, and it is work we must all do. I encourage all members of the NASA family to participate in a Juneteenth celebration and reflect on this historic event in our history. Let us reaffirm and rededicate ourselves to building a more perfect union." Kisstaman Epps, the Program Coordinator, represented NASA WV SGC at the Juneteenth Jubilee that was held in Clarksburg, WV.

July 11-16, 2022

The Norman Jordan African American Arts Heritage Academy (NJAAHA) Camp at West Virginia State University (WVSU) in Institute, WV

NASA WV SGC had an opportunity to provide five full one-week scholarships to participants of the NJAAHA camp.

Kisstaman Epps, SGC Program Coordinator spoke to camp leadership and participants regarding the connection to STEM and the Arts. Kisstaman reminded and encouraged students to be proud of their West Virginia history. There was a lecture by artist Rev. Frederick F. Hightower. Hightower created the Katherine Johnson Statue there on the campus at WVSU and the statue was dedicated in 2018. If you have not seen the statue yet, the next time you are in the Charleston/Institute area, please stop by for a moving visit. NASA astronaut, Dr. Yvonne Cagle was in attendance during the official dedication in 2018. Marshall University graduate student, Madysen Terry a summer NASA intern shared her research regarding STEM and the Arts. Students were encouraged and had a broad range of questions for both Kisstaman and Madysen. The students appreciated Madysen sharing her personal academic and arts journey.



Hightower signs a student's sketches



Marshall University grad student, Madysen Terry, presents PowerPoint to NJAAHA participants



NJAAHA 2022 Participants at WVSU

July 24-29, 2022

NASA SGC Supports Health Sciences & Technology Academy (HSTA) Rising Juniors and Seniors

NASA Space Grant took the opportunity to participate in the speed-dating style presentation for HSTA students. HSTA is a one-of-a-kind mentoring program in the state of West Virginia that helps participating high school students enter and succeed in STEM-based undergraduate and graduate degree programs. HSTA marshals the efforts of hundreds of mentors, teachers, community members, higher-education faculty and staff, and the HSTA participants themselves through a framework that supports students facing social and financial challenges to obtaining a diploma and moving on to college. HSTA participants are primarily students who have grown up in rural communities and are first in their families to attend college. More than half are financially disadvantaged, and one-third are African American.



WV HSTA students listening to presentations

August 5-6, 2022

Space Grant Supports WVROX

It really happened folks! NASA WV SGC was there to see it. WVROX, the world's first and only FIRST Robotics Competition endurance event, ran on a biennial basis for 26 hours and 14 minutes. Due to covid 19, they had to take a brief hiatus but WVROX returned to West Virginia University, hosted by MARS Team 2614 and WVU. There were teams from IN, MI, MS, OH, PA, TN, VA, WI and of course WV.



Dr. Earl Schime introduces WVROX 2022

August 21-23, 2022

Interns Travel To Regional Conference

2022 Mid-Atlantic Regional NASA Space Grant Consortia Meeting was hosted by the Delaware SGC. NASA WV SGC was proud to have NASA Student interns travel to the regional meeting with us from Glenville State University, Marshall University, West Virginia State University and WVU.



From Left to right, Madysen Terry, (Marshall grad.) Natalie Fout (Glenville State) Damon LeMaster (WVU), Ciera Moles (West Virginia State University)

Please Save the date:
Fall Board of Directors Meeting at Tamarack
Thursday, October 13th "Dinner"
Friday, October 14th Meeting on campus at WVU Tech