Wright-Patterson AFB Educational Outreach K-12 STEM WPAFBSTEM.com

WPAFB E.O. NEWSLETTER

FEBRUARY 2025

WHAT'S HAPPENING?

Tech Fest

FIRST Lego League Explore

FIRST Tech Challenge

DAF LEGACY

WHAT'S COMING UP?

Read Across America

FIRST Lego League Explore State Championship

FIRST Lego League Challenge Ohio State Championship

FIRST Tech Challenge Ohio State Championship

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TechFest was a blast!

The office had an incredible turnout, and our team had a fantastic time volunteering! The DoD STARBASE Wright-Patt booth was buzzing with excitement as participants explored Sphero Indi robots and got hands-on with circuit board activities.

Meanwhile, The Outreach Office took a deep dive into forensic science, where visitors got to try their hand at dactyloscopy (that's fingerprinting, for all the detective fans out there!). They even took home their own fingerprints—plus a cool DIY trick to lift prints using graphite and tape!

A huge thank you to everyone who stopped by the booths! Until next time, keep exploring, experimenting, and having fun with STEM!

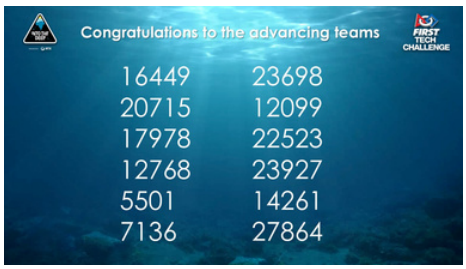
A link to Facebook post to see the Reel:
https://www.facebook.com/share/v/1FCFSw58hG/

E.O. FEBRUARY PROGRAM HIGHLIGHTS

FIRST LEGO League EXPLORE

FIRST LEGO League Explore teams showcased their programs in February with events in Cincinnati and Shaker Heights, OH! 15 teams presented at these events, showing off all they have learned and accomplished so far this season. FIRST® LEGO® League Explore is the middle of three divisions (Discover, Explore, and Challenge) of FIRST LEGO League, created to inspire youth to experiment and grow their critical thinking, coding, and design skills through fun hands-on STEM learning and robotics. All FIRST® programs are built on a foundation of Core Values, celebrating discovery, impact, inclusion, teamwork, and fun. Teams of children ages 6-10 have investigated a challenge related to a real-world theme, designing and building their solution as a group. During the 2024-2025 FIRST season, FIRST® DIVE℠ presented by Qualcomm, teams will use their STEM and collaboration skills to explore life beneath the surface of the ocean. Along the way, we'll uncover the potential in each of us to strengthen our community and innovate for a better world with healthy oceans. As always, we were so impressed with what these young innovators were able to explore, create, test, and share!

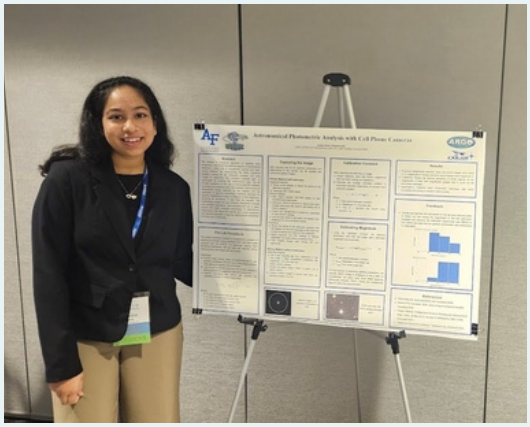
FIRST TECH CHALLENGE



In February, Ohio FTC wrapped up the qualifying events for the INTO THE DEEP season. 29 teams competed at the Van Wert Qualifier, 25 teams competed at the Kent State University Qualifier, and 26 teams competed at the Miami University Qualifier. Between these 3 events there were close to 200 volunteers. Teams gathers for their final qualifying events for another chance to advance to the Ohio Championship held at Hobart Arena on March 8. What an exciting month full of dedicated students, passionate volunteers, and impressive robots! Congratulations to the teams advancing to the Ohio Championship. Thank you to everyone who took part in making these events happen. We are looking forward to seeing the teams compete at Hobart Arena for a chance to advance to the FIRST Championship in Houston, TX. Good luck to all of the teams!

E.O. FEBRUARY PROGRAM HIGHLIGHTS

JR. APPRENTICE ANUSHA



Anusha, a Jr. Apprentice in the Department of Air Force's LEGACY program, has been involved since 6th grade, attending STEM-focused camps and working as an apprentice at the United States Air Force Academy (USAFA) for the past two summers. This summer, she worked with Lt. Col. Benjamin Roth in the physics department to develop a hands-on astronomy lab for the academy. The lab taught students basic photometry using smartphone cameras and open-source software, making astronomy more accessible and applicable for both education and research. Her work earned praise from her mentor, who noted how Anusha rapidly learned key skills and created a widely accessible lab that was integral to the course.

Anusha's project, "Astronomical Photometric Analysis with Cell Phone Cameras," was selected for presentation at the 113th Annual AAVSO Meeting in Huntsville, AL. Initially rejected for an online presentation, Anusha adapted her poster for in-person presentation, gaining valuable experience in scientific communication. She focused on making the educational aspects of her project clear and effective, receiving feedback that helped her refine her work. The experience also gave her the opportunity to connect with experts in astronomy and education, further fueling her interest in these fields.

Outside of her STEM work, Anusha is an accomplished dancer, officer in FBLA and HOSA, and an active member of various academic organizations. Fluent in English, Gujarati, and Hindi, she has a passion for connecting with her culture and expressing herself creatively. Through LEGACY, Anusha has been exposed to aerospace engineering and astronomy, helping her refine her career aspirations. She hopes to contribute to advancements in space exploration and make aerospace technology more accessible after pursuing a career in aerospace engineering.