

FLORIDA TECH

M A G A Z I N E

SPRING 2026

Everything to Gain

When academics get competitive, learning isn't graded—it's proven.



In This Issue

Spring 2026 • Volume 25, Issue 1

Student Design Showcase

This year's Northrop Grumman Engineering and Science Student Design Showcase featured 232 projects, from a brick-baking lunar rover to a colorful poster exploring whether adverse childhood experiences may erode trust in the U.S. court system. At the showcase, students engaged with an all-star team of industry leaders serving as judges, including 20 university alumni—with a whopping 41 degrees among them—from longtime showcase supporter Northrop Grumman Corp.



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On the Cover: Aerospace engineering senior Alessandro Leita at the Northrop Grumman Engineering and Science Student Design Showcase with his team's capstone project, Free-Fall Responsive Operator for Simulating Thermofluid (F.R.O.S.T.). The F.R.O.S.T. team designed and built a prototype drone capable of producing accurate sloshing data for validation against existing computational fluid dynamics models.

A MESSAGE FROM THE PRESIDENT

Hello Panthers,

As we move from the energy of spring into summer, I am reminded of what defines Florida Tech: a future-oriented community driven by innovation, collaboration and progress.

That spirit was on full display throughout the spring semester—from the Northrop Grumman Engineering and Science Student Design Showcase, where through 232 different individual and team projects, students transformed ideas into real-world solutions, to our spring 2026 commencement ceremonies celebrating the achievements of 1,950 of our newest graduates. Welcoming retired astronaut and former Dean Winston Scott as commencement speaker was a fitting reminder of the ambition and determination that continue to shape our university.

We remain forward focused and actively planning for an even brighter future. One of the clearest signs of that proactive mindset is the upcoming grand opening of Crimson Crossing, our new 556-bed student housing facility. More than a residence hall, it is an investment in the student experience, designed to support learning, connection and personal growth while helping every Panther thrive.

Summer is a season of preparation and possibility across our campus. Teams are advancing initiatives that will elevate how we teach, learn and support our students while we prepare to welcome a new class of Panthers this fall. I am excited for what lies ahead and confident in what we will continue to achieve together as a university community.

What remains constant is the spirit of Florida Tech: a willingness to take on meaningful challenges and build what comes next, together.

Thank you for being part of that ongoing journey and for helping shape the future of this stellar institution through your ongoing support and contributions.

Go Panthers!

Sincerely,

John Nicklow, Ph.D.
President



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Florida Tech, Eve Air Mobility Formalize Collaboration

A new agreement between Florida Tech and Eve Air Mobility will supercharge student experiences in the evolving field by providing industry-level technical challenges for them to tackle, guest lectures, potential internships and more from the Melbourne-based urban air mobility (UAM) business of aerospace corporation Embraer S.A.

The Memorandum of Understanding (MOU) Florida Tech and Eve signed also calls for discussions on future research collaborations in areas of interest to both parties, including aviation human factors, aviation operations, autonomy, aviation business management approaches and aviation psychology.

“This partnership plays a vital role in advancing cutting-edge research and driving innovation across the urban air mobility ecosystem,” said Luiz Mauad, vice president of Customer Service at Eve Air Mobility. “We believe that partnering with a prestigious, STEM-focused university like Florida Tech will help establish a strong pipeline of high-quality talent through internships, pilot projects and local career fairs. More importantly, this MOU lays the foundation for ongoing collaboration, enabling us to tackle real-world challenges together and co-develop curriculum that aligns with the evolving industry needs.”

That exposure to real-world challenges associated with advanced air mobility (AAM) is one of the most valuable aspects of the agreement, said Meredith Carroll, professor of aviation human factors, director of the ATLAS Lab and, along with Benjamin Emeterio '21, ecosystem strategy lead at Eve Air Mobility, co-leader on the two-year MOU.

“We can provide theoretical problems for them to solve, but if Eve has actual technical problems in need of innovative solutions, that process gives students real-world experience—and it’s a motivating factor,” she said. “If they produce a great solution, maybe there will be interest in internships or even



employment. So, it really enhances the educational aspect of the courses.”

Because Eve is dedicated to the development of a range of solutions for the UAM market, including an electric Vertical Take-Off and Landing (eVTOL) aircraft, future research can tap into a variety of critical areas, Carroll and Mauad noted.

One topic that plays to this partnership’s strengths is a future focus on an understudied participant: the passenger on these electric-powered air taxis. Eve built a cabin facsimile and has done user-experience testing, but the field is still rich with unanswered questions, Carroll said.

“On some of the proposed flight paths, people will experience acceleration forces that are very different from their experience on an airliner,” she said. “Are they going to tolerate that well? Will they want to fly again? So, the sounds, the vibrations—studying those factors, how they impact human comfort. That might be a cool topic on which we could collaborate.”

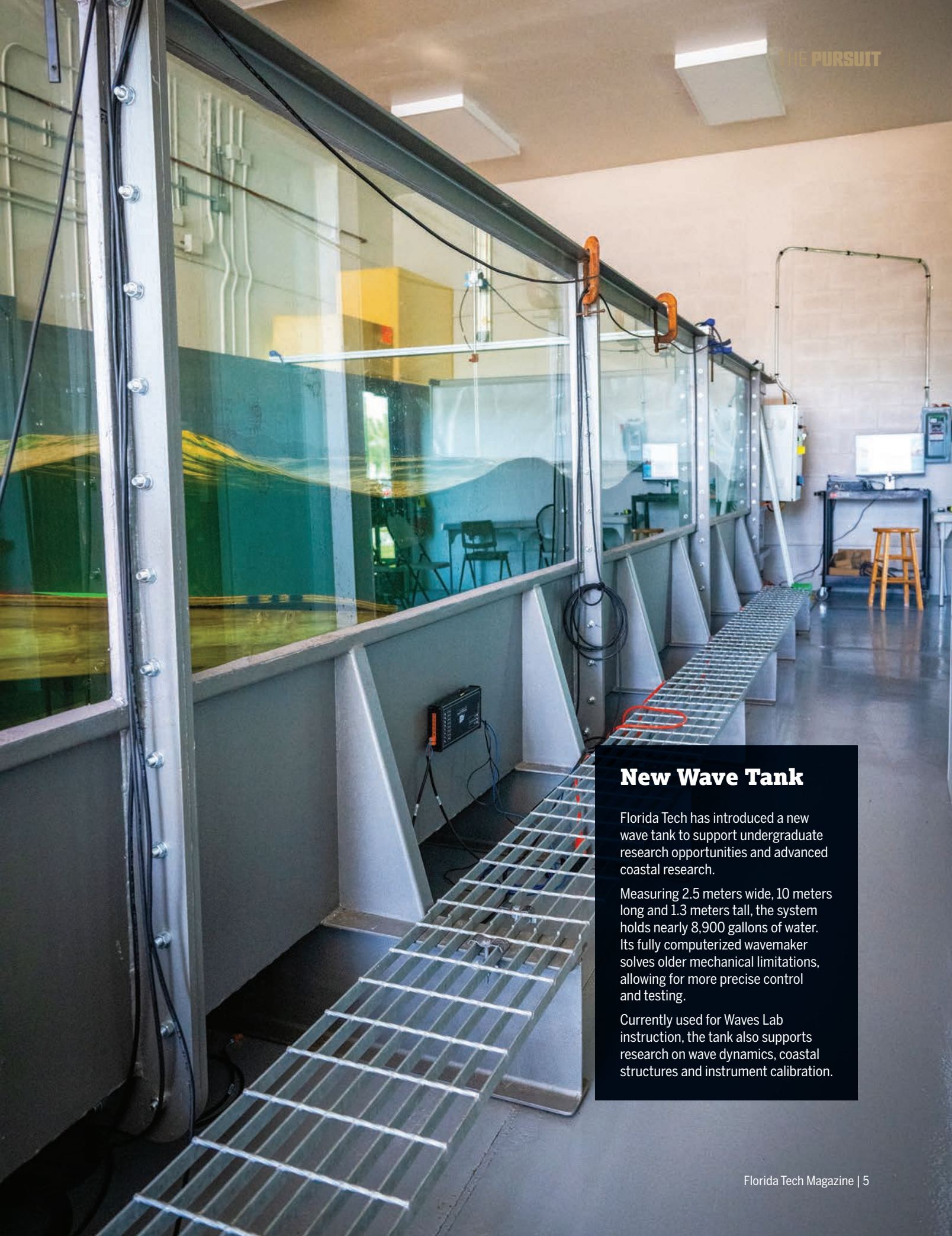
Another research area could center on Eve’s work on Unmanned Traffic Management. As air taxis come to airports and other transportation centers,

conceivably just a decade or so away, managing diverse types of vehicles in the airspace will be critical. Coupling that effort with Florida Tech’s air traffic controller program is a collaboration worth considering, Carroll said. The rise of this type of transportation—point-to-point, environmentally friendly, designed to excel in crowded urban environments—is inevitable and important, Mauad said.

“The evolution of eVTOL aircraft and advanced air mobility marks a turning point in how we think about transportation, urban planning and sustainable mobility,” Mauad said.

Over the next five years, the industry focus will be on developing regulatory and safety frameworks to continue to build public trust in this transportation system. A decade out, Mauad sees eVTOLs “fully integrated” into major cities.

“By year 15, I hope UAM has widespread international adoption, and autonomous operations become standard,” Mauad shared. “At this point, UAM will no longer be considered a novelty but rather, a necessity, which significantly reduces urban congestion, carbon emissions and travel time.”



New Wave Tank

Florida Tech has introduced a new wave tank to support undergraduate research opportunities and advanced coastal research.

Measuring 2.5 meters wide, 10 meters long and 1.3 meters tall, the system holds nearly 8,900 gallons of water. Its fully computerized wavemaker solves older mechanical limitations, allowing for more precise control and testing.

Currently used for Waves Lab instruction, the tank also supports research on wave dynamics, coastal structures and instrument calibration.



FAMILIAR FACES:
Stanley Pimenta

A SERIES CATCHING UP WITH THE CAMPUS FIGURES WHO MADE YOUR TIME AT FLORIDA TECH MEMORABLE

For more than three decades, Stanley Pimenta has been a steady presence at Florida Tech.

Hired through Bridges, a former Brevard-based special needs program, Pimenta began working at Evans Dining Hall in April 1991, helping unload racks from the dishwashing machines and stack clean plates in the dish room. Over time, he shifted to the dining room, where he helps keep the space tidy and running smoothly.

Throughout the years, he has watched the campus grow, and when Panther Dining Hall opened, he, too, transitioned to the new space. Today, he works weekdays during the lunch rush, focusing primarily on keeping the dish-return area clean and organized.

The work may seem simple, but it plays an important role in the daily flow of campus life, and Pimenta takes pride in making sure the area is ready for the next group of students, many of whom have come to recognize him over the years.

“I tell them, ‘Have a nice day,’ and I tell them, ‘Have a nice night,’” he said.

When asked what he notices most about students, Stanley laughed:

“They are very hungry students.”

Outside of work, Pimenta is supported by his houseperson, Sister Frances M. Sampson, who helps coordinate his daily routines. Together, they are part of Holy Name of Jesus Catholic Community, where faith plays an important role in Pimenta’s life.

“I believe in Jesus all the time,” he said.

Pimenta grew up in Honolulu on the island of Oahu and over the years, has traveled to places such as New York, New Jersey and back to Hawaii to visit family. When he is not working, he enjoys spending time outdoors, specifically, camping.

After 35 years at Florida Tech, Pimenta has become one of the quiet constants of campus life. Thousands of students have passed through the dining hall during that time, but he has remained—a familiar and friendly presence.

And when students pass by his station near the dish-return window, they can usually count on hearing the same simple greeting that has been part of the dining hall routine for decades:

“Have a nice day.”



Astronaut Visit

Two-time shuttle astronaut **KATHRYN HIRE** '91 M.S. brought her unique experiences and insights to campus April 7 as Florida Tech and the Astronaut Scholarship Foundation (ASF) convened a lecture and awards presentation honoring seniors and 2025 Astronaut Scholars Peyton Hay and Sloan Hatter. Hire, a groundbreaking aviator who, in 1993, became the first female in the U. S. military to be assigned to a combat aircrew, spoke to students about embracing opportunities and possibilities—and understanding the path to success may not be a straight line.

Career Sprint Preps Students for Post-Grad Life

In March, the Nathan M. Bisk College of Business completed its inaugural Student Career Sprint program, a six-week professional development bootcamp designed to bridge coursework with real-world readiness through an immersive blend of coaching, workshops and employer-focused skill-building.

Twenty students from across the college participated, from first-year Panthers to graduating seniors. Throughout the program, they engaged in mock interviews, résumé refinement, strength-based assessments, personalized coaching and workshops on business planning, entrepreneurship, salary negotiation, artificial intelligence in business and more.

The hybrid format, featuring four in-person evening sessions and supplemental virtual content, provided flexibility without sacrificing intensity.

A defining feature of the program was its strong alumni involvement. All nine mentors were Florida Tech graduates, and many of the workshop speakers were alumni.

“I chose to mentor in the Career Sprint program because I wanted to share the kind of guidance I wish I’d had as a Florida Tech student,” said **COLE STUBBE** ’22, ’23 M.S. “The transition into the professional world can be a big shift, and I enjoyed helping the students navigate that change and move confidently into their next chapter.”

Florida Tech’s Office of Alumni Affairs and Career Services teams brought Career Sprint to life after **SAURABH GUPTA** ’04 M.S. proposed the idea to university President John Nicklow.

“By entrusting us with the opportunity to design and build this program from the ground up, President Nicklow gave us the chance to create something truly meaningful for our students,” said **GINA YATES** ’19, assistant vice president, Alumni Affairs. “It was an incredibly rewarding experience and far exceeded all our expectations.”



“The transition into the professional world can be a big shift, and I enjoyed helping the students navigate that change and move confidently into their next chapter.”

— Cole Stubbe ’22, ’23 M.S.

The program reached capacity only a few days into its launch, reflecting high student interest. And its impact was immediate.

“Because of the connections and networking opportunities this event created, I was fortunate enough to secure two operations internships,” student and Career Sprint alumna Caitlyn Keebler said.

Another student who participated has accepted a full-time position with one of the mentors in the program.

“It’s exactly the path I hoped to be on,” Keebler said. “And it would not have happened without the opportunities this program provided.”

MENTORS

- » Jessica Applewhite ’21
- » Matthew Bowden ’23
- » Connor Cassidy ’19, ’23 MBA
- » Kendall Gavin ’25
- » Rick Horner ’90 M.S., ’93 MBA
- » Scott Lewitt ’82, ’85 M.S.
- » Rebecca Menard ’03
- » Chris Parlier ’09 M.S.
- » Cole Stubbe ’22, ’23 M.S.

PRESENTERS

- » Emily Glatz ’15
- » Madison Hatzel
- » Melissa Patton
- » Daniel Rassoul ’17, ’19 MBA
- » Letwan Sutton ’20 A.S., ’20, ’21 MBA

University's Creative Tech Hub Turns 10

When the Digital Scholarship Laboratory (DSL) opened in Evans Library in January 2016, it was designed as a place where technology, research and creativity could intersect.

Ten years later, the space has grown into one of campus' most versatile resources, supporting everything from immersive virtual reality experiences to podcast production and 3D prototyping.

Located on the second floor of the library, the DSL gives students and faculty access to specialized tools that help bring ideas to life. The lab was created to support research and teaching across disciplines by offering advanced digital technologies and expertise that individuals might otherwise find difficult to obtain.

That mission continues today.

To celebrate the milestone, DSL innovation specialist Martin Gallagher shares 10 things you may not know about the lab.



10 Things You Might Not Know About the DSL

1 | IT'S DESIGNED FOR EVERY DISCIPLINE.

"The DSL was designed with everyone in mind. It doesn't apply to just one department or curriculum. We are open to all, and we have technology and software available to students, regardless of their chosen degree. We aim to expand opportunities for learning."



6 | NOT ALL ITS TECHNOLOGY IS DIGITAL.

"The artwork was designed by an Orlando-based artist, who was commissioned by a former dean of libraries, to create these unique pieces for the DSL."

Next time you are in there, see if you can find all the words in the textile above the grey couch.

9 | THE SPACE IS BUILT FOR COLLABORATION.

"The DSL is a hub for collaboration. We have two collaboration stations with screens that can accommodate up to four laptops, along with open spaces and comfortable seating. It's a relaxed environment for discussion and teamwork. We even have a full-body massage chair that students use while brainstorming ideas."

2 | VIRTUAL REALITY (VR) IS PART OF THE TOOL KIT.

"Virtual reality can be a powerful tool for learning—calming the mind, creating focus and strengthening memory. When learners are relaxed and emotionally engaged, retention follows naturally. It's also a lot of fun."

4 | A MASSIVE VIDEO WALL POWERS PRESENTATIONS.

"Our video wall is used for many project presentations. It provides a large-scale view of ideas and can also serve as a relaxation screen, featuring fish tanks, fireplaces in the winter and meditation videos."

7 | ITS GIS TOOLS MAP THE WORLD.

"Our GIS [Geographic Information System] software enables detailed and targeted visualizations through maps and charts. This helps present complex data models in a way that's easy to understand."



3 | IT HOUSES A FULL PODCAST AND VIDEO STUDIO.

"Our podcast studio is widely used and provides a strong communication medium for discussion, learning and outreach to the community and industry. It is also a fantastic medium for retaining ideas and group focus."

5 | ITS 3D PRINTER BRINGS IDEAS TO LIFE.

"Many ideas and projects require hands-on interaction to fully understand their purpose. Our 3D print lab allows users to turn concepts into reality. Students frequently print project components and custom parts for assembly. It's a highly used and essential part of the engineering tool kit."

8 | READY-TO-USE CREATIVE SOFTWARE IS AVAILABLE THERE.

"Adobe Creative Suite and many other programs are available to support creative development across video, music, design and AI media. Our systems provide professional-level capabilities that help students build industry-ready skills."

10 | THE UNIVERSITY USES IT AS A SHOWCASE SPACE.

"The DSL is a showcase space used for library and university programs and functions. The audience loves the architecture and décor, as well as the views. I take pride in giving tours to groups from across the university, as well as industry and community partners. We see ourselves as a source of inspiration for the university and continually challenge ourselves to offer new insights and skill sets to all."

Dassault Falcon Jet Joins Vertex as Newest Business in Residence

Dassault Falcon Jet, a wholly owned subsidiary of Dassault Aviation, is the newest business in residence (BIR) at Florida Tech's Vertex Applied Innovation Hub.

Alongside other visionary companies in the BIR program, including Larsen Motorsports, SafeSky Systems USA and Zeal OTM, Dassault Falcon Jet is now part of Vertex's impactful ecosystem.

That means access to the facility's advanced equipment and spaces, as well as opportunities for expert collaboration, all in the realm of one of the country's leading STEM universities.

"Dassault Falcon Jet is a high-value, strategically aligned partner," said Vertex executive director Samantha Miles. "More importantly, it is a company that puts words into action—and we

are thrilled to welcome them as our newest BIR."

The company has made Melbourne a focal point for recent expansion efforts.

"With 400 high-quality jobs being created in Brevard County, Dassault Falcon Jet's MRO [maintenance, repair and overhaul] facility strengthens our region's role as a global hub for aviation excellence and reinforces the value of a highly skilled workforce," said Lynda Weatherman, president and CEO of the Economic Development Commission of Florida's Space Coast. "Growing collaboration with Florida Tech's Vertex Applied Innovation Hub reflects our business community's shared commitment to innovation and delivering world-class talent for the aviation ecosystem on Florida's Space Coast."

In July 2025, Dassault opened a massive MRO facility at Orlando Melbourne International Airport. Described as the company's "flagship service center for the Americas"—as in North America and Latin America—the 250,000-square-foot operation can house up to 16 Falcon aircraft.

"Their investment and presence in Melbourne demonstrate a deep commitment to our community, while our collaboration here, at Vertex, accelerates advanced training, composites capability and real MRO readiness," Miles said. "Together, we're converting vision into measurable regional impact and setting a new standard for aerospace innovation on the Space Coast."



Honor Flight

Amid a patriotic crowd bedecked in red, white and blue at Melbourne Orlando International Airport April 11, Florida Tech men's and women's soccer and men's cross country-track programs waved American flags, held home-made signs and cheered for local veterans concluding their Space Coast Honor Flight roundtrip to Washington, D.C. There, the veterans visited memorials dedicated to their sacrifice and service before arriving home for the Veterans Walk of Honor.

"It was a special event and a reminder of the impact of service and sacrifice," said men's cross country-track head coach Pete Mazzone. "We were honored to recognize and mingle with these heroes who have given so much for our country."



Everybody In



Panther Athletics Partners With All Ability Sports to Inspire

By Jerry Durney

In 2025, Florida Tech Athletics introduced an inspiring new initiative: the All-Abilities Buddy Program. In partnership with All Ability Sports, a Brevard Fellowship of Christian Athletes (FCA) organization dedicated to supporting individuals with disabilities, the program creates meaningful, long-term connections between Panther scholar-athletes and young adults in the community.

Inspired by his personal community service experiences, former Panther men's lacrosse player **BRIAN BARLOTTA** '25 started the initiative.

"I was introduced to them through Space Coast Field of Dreams. They asked me to organize something with

“Seeing what they can do to impact an individual is really at the core of what we mean when we say we're scholars, champions, leaders.”

— Jamie Joss

some of our athletes here to help out with their 'family fun day,'" Barlotta says. "We heard from the athletes afterward that they really liked the experience. They got along really well with the kids and their families. So, we realized that there was something more that could be there."

When Barlotta brought his idea to athletic director Jamie Joss, he was immediately on board, recognizing the potential benefits for everyone involved.

"It just warms my heart to see these younger athletes have the opportunity to get engaged with our teams," Joss says.

Through the program, each Florida Tech athletic team is paired with a buddy between ages 18 and 22 with a disability. To kick off the experience, buddies participate in a Signing Day ceremony—modeled after the traditional college athletics signing experience—that welcomes them into the Panther family and symbolizes the beginning of a potentially life-changing bond.

From there, buddies become "honorary members" of their teams, coming to games, practices and team events that allow them to experience the connection and camaraderie that come with being on a college sports team.

"I often say that I think the impact is far greater for our teams than what we're giving back to the athlete," Joss says. "Seeing what they can do to impact an individual is really at the core of what we mean when we say we're scholars, champions, leaders."

Barlotta echoes Joss' sentiment and is grateful for the connections the program has established.

"I also think it helps with the mentality of, when you're on your last rep at practice, and you look to the side, and you see a kid that's your age that wants to be on that field so badly and would give anything to be in your shoes," Barlotta says. "You look over there, and you understand that you're not just playing for yourself and your team, but you're playing for something so much greater."

Panther coaches were also eager to participate in the All-Abilities Buddy Program—not just for the opportunity to reach out to the community, but also for the lessons it would instill in their scholar-athletes.

"I think it's given all the girls on the team a great perspective as to what's more important in life than sports," says women's soccer head coach Katy Freels. "It's been a really, I think, fulfilling experience for everybody. It's great for

our girls to get to live out what we say. It's not just words and values; it's a tangible way that we're living."

"They were all for it," says men's cross country-track head coach Pete Mazzone. "Sometimes, they're so involved in their own academics and schoolwork, they may not be looking for the opportunity. But that's our job as coaches: You present them with that opportunity, and they gravitate to it."

With the initiative's first couple of semesters complete, the teams have fully embraced the new members of the program and have shown their new teammates that they truly do belong.

"I think for us, one of our core values is family, and so, getting to see them live that value out in a tangible way is really cool," Freels says. "They're investing in somebody else."

The All-Abilities Buddy Program represents more than just an athletics initiative—it's a reflection of Florida Tech's mission to build stronger communities, create opportunities for connection and inspire its athletes to lead with purpose.

And it's an effort that involves all of Florida Tech Athletics.

"I would be very remiss if I didn't mention [associate athletic director for external operations] Christina Hardman and her staff, who have done a different level of work to ensure that we stewarded this the right way, moving forward with the great Signing Days," Joss says. "They helped make it such a big deal for these kids. You look around at those events, and most of the people there are teary-eyed seeing how much it means to them to be in this. It's what's so great about serving."

Joss hopes that it builds a legacy within Panther athletics for years to come.

"Hopefully, 10 years down the road when we're doing this, we can have an alumni base of 100-plus people that have gone through this process—that's pretty special," he says.



SNEHA SUDHAKARAN

Don't Be Fooled: Detecting and Preventing AI Hallucinations in Digital Forensic Investigations

As generative artificial intelligence (AI) becomes increasingly common in cybersecurity, we need to be cautious and ensure that the widely used tools do not compromise the accuracy and integrity of our work.

While these technologies significantly improve efficiency and productivity, they also introduce a critical challenge: AI hallucination.

AI hallucination is when AI models generate plausible but incorrect, misleading or fabricated information. In digital forensics research, where evidence accuracy and integrity are essential for investigative conclusions and legal proceedings, hallucinated outputs can lead to digital artifact misinterpretation and, potentially, flawed investigative outcomes.

My research, conducted alongside a group of graduate students, focuses on understanding if generative AI models produce hallucinated responses during forensic research and how researchers can systematically validate the integrity of AI-generated outputs.

Specifically, the work examines how large language models (LLMs) interpret complex forensic artifacts, such as system logs, network traces, malware reports and memory analysis results. By analyzing these interactions, we identify scenarios in which generative AI models may infer unsupported conclusions or generate fabricated explanations that appear technically convincing but are not supported by actual evidence.

A central contribution of our research, we are developing educational frameworks and validation strategies that teach researchers and students how to critically evaluate generative AI outputs.

Instead of treating AI responses as authoritative answers, our work also promotes a methodology in which



My research focuses on understanding if generative AI models produce hallucinated responses during forensic research and how researchers can systematically validate the integrity of AI-generated outputs.



.....

Sneha Sudhakaran
assistant professor

AI-generated explanations are cross-checked with forensic artifacts, verified against trusted sources and analyzed using structured reasoning. This approach emphasizes the importance of evidence-based validation when integrating AI into forensic workflows.

Another key aspect of my AI-related research involves effective prompt design and research literacy. Because generative AI models respond heavily to how questions are framed, poorly constructed prompts can lead to incomplete or hallucinated responses.

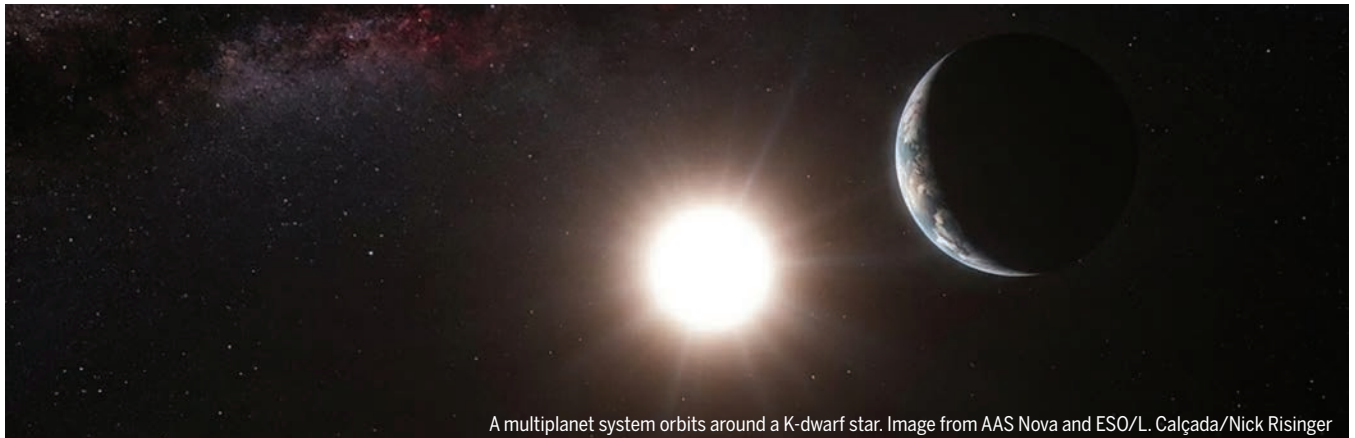
My work explores how investigators can craft structured prompts that guide AI systems toward more reliable outputs while minimizing ambiguity.

In addition, I emphasize the importance of research reading and verification, encouraging users to compare AI responses with peer-reviewed research, technical documentation and established forensic methodologies.

The International Conference on Cyber Warfare and Security (ICCWS) recently published work I conducted with Naresh Kshetri, a faculty member at Rochester Institute of Technology, about how forensic research requires this kind of hybrid model (human plus AI) for accurate research.

This combination of prompt engineering and critical research evaluation helps reduce the risk of blindly trusting AI-generated explanations.

SNEHA SUDHAKARAN is an assistant professor in the Department of Electrical Engineering and Computer Science. Her expertise is in cyberdefense, with special focus on cyberforensics mobile security, application security and memory analysis.



A multiplanet system orbits around a K-dwarf star. Image from AAS Nova and ESO/L. Calçada/Nick Risinger

Rare Teenage Planetary System Assessment Deepens Understanding of Cosmic Evolution

Planetary systems, such as our solar system, take hundreds of millions of years to evolve. Since humanity has only existed for a sliver of that time, astronomers have only observed planetary systems at birth or, more often, long after they have settled into adulthood. There is an information gap about what happens in the middle.

Soon, this understanding will change. For the first time since its discovery in 2020, astronomers can characterize the teenage planetary system TOI-2076 in detail. The system, spotted mid-transition, offers a novel lens into the once-mysterious evolutionary stage.

“An Adolescent, Near-Resonant Planetary System Near the End of Photoevaporation,” published in *Nature Astronomy*, observes and models potential markers of cosmic adolescence using key evidence: the separation of a once tightly packed planetary system and the dynamic evaporation of planets’ atmospheres caused by intense stellar radiation.

Florida Tech assistant professor Howard Chen, who simulates planetary evolution, co-authored the paper with a global group of researchers—including astronomers at California Institute of Technology, the University of Hawaii and Nanjing University—to test his models’ ability to match this system’s outcome from simulated origins. His calculations provide strong insight into the short-lived shift from planetary youth to maturity across the universe.

“The transformative period is so short compared to the entire lifespan of the system,” Chen said. “That period is really the key in determining how it turns out at its mature state.”

The system’s four planets orbit a youthful K-dwarf star—at “just” 210 million years old, an adolescent by cosmic standards. Using telescopes on the ground and data from NASA’s Transiting Exoplanet Survey Satellite (TESS) mission, the scientists found that the planets are spaced with a nearly consistent orbit sequence, indicating they were once tightly packed but are slowly spreading apart. They also found that the planets all share similar rocky cores with a range of different atmospheres: The innermost planet completely shed its original gases, while the outer three retained their atmospheres.

Chen predicted that the gradual shedding of birth atmospheres was driven by photoevaporation: when powerful radiation from an energy source, such as a star, heats a planet’s atmosphere until gas escapes into space. Planets that are closer to the star, and thus receive higher amounts of radiation, lose more gas and are left with more rock than their farther counterparts.

He used his existing evolution models to simulate how photoevaporation would shape the evolution of similar planets from origin to adolescence, all born with the same initial rock-to-gas composition.

Would his simulation yield the same result that was observed in real life?

Yes. In his simulation, Chen found that the planets naturally evolved into a state similar to the actual system’s observed state. Therefore, he could assume that photoevaporation was at play; radiation from the system’s star is what stripped some planets into bare rocks while leaving others with a gaseous atmosphere. The models also indicated that shrinking planet mass contributed to the gradual distancing of planets.

As someone who primarily works with theoretical models, Chen is thrilled that his simulations matched the observed reality.

“For me, the whole point of going into modeling is to be able to connect with observations. You want your models to say something about the real world, but that’s not necessarily the case every time,” he said. “To see the model work in the real world and explain what’s happening is pretty powerful.”

The simulation also anticipates the time it takes a system to reach adolescence, suggesting that most atmosphere loss happens within the first 100 million years of a system’s life. Then, it stabilizes and remains as is for billions of years.

Chen’s model will help astronomers unpack the histories of older planetary systems. It can also guide predictions of how the young planets they’ve discovered will eventually evolve.

Researchers Identify Where Local Land and Sea Uses Suppress Climate Refugia for World's Coral Reefs

As ocean temperatures rise because of climate change, corals and other sensitive organisms survive where temperatures are less extreme. But a new study from Florida Tech researchers, published in *Communications Earth & Environment*, found that local land and sea use have suppressed the benefits of these potential safe havens in some places.

Extended periods of unusually warm water temperatures, known as marine heatwaves, drive deadly mass-bleaching events on coral reefs, like those seen in the Florida Keys in 2023 and the Great Barrier Reef in 2024 that made global headlines. These mass-bleaching events can cause cascading effects that disrupt the rest of the ecosystem.

"Identifying locations where coral reefs have been least impacted by marine heatwaves and where the environment is most favorable for the survival of corals, known as climate refugia, is critical for protecting these

complex ecosystems and the benefits humans gain from them," explained **ANDREW WALKER '21**, a Ph.D. candidate at Florida Tech and lead author of the new paper.

Scientists and researchers also have warned that human-caused disturbances, such as sewer discharge, excess fertilizer use and overfishing, negatively impact coral reefs on a local scale. The new study broadens the view of these impacts.

"Our study sheds light on the prevalence of both local impacts and marine heatwave impacts on stony corals, revealing where these local-scale effects are likely suppressing otherwise viable climate refugia," said co-author Rob van Woesik, professor and director of the Institute for Global Ecology at Florida Tech.

The Florida Tech team also examined different environments that have been hypothesized to act as climate refugia: high-latitude reefs, deep reefs,



remote, offshore reefs and turbid reefs. They found that turbid reefs showed the most potential to act as climate-change refugia.

"These findings should empower regional and local governments, management and local organizers to protect their coral reefs from climate change through reducing the stress corals face from other, more localized disturbances," Walker said.

Undergraduate Experiment Selected for Spaceflight

Florida Tech is in its second season of the Student Spaceflight Experiments Program (SSEP). Leading the way is this year's winning project: "Effects of Microgravity on Neurodegeneration using Tauopathy Model," by sophomores Cordelia Case and Kayla Conklin and juniors Alexis Hopper and Jessica Watkins.

The experiment, set for testing aboard the International Space Station (ISS) this year, will explore the effect of microgravity on the rate of neurodegeneration found in diseases such as Alzheimer's. It was one of 20 proposals from universities across the United States and Canada selected to fly in SSEP Mission 21.

The winning proposal investigates tauopathy-related diseases, which are characterized by the clustering of tau: a protein found to play a role in degeneration of neurons. In these diseases, abnormal aggregation of

this protein disrupts the structural integrity and function of neurons in the brain, leading to degradation. It's established that microgravity can alter gene expression, but its effects on this specific type of neurodegeneration have yet to be researched, the students wrote.

They will compare neurodegeneration rates by running identical tests in microgravity and on Earth. Their work will help scientists understand whether microgravity accelerates or mediates tau-associated degeneration, providing insight for developing neuroprotective strategies in space.

Florida Tech's inaugural SSEP season is simultaneously underway. Last year's winning project, "Hydrogel-Radiation shielding viability under the influence of microgravity," is almost ready for testing aboard Mission 20. The team is actively preparing its experiment for takeoff, currently set for October.

The university's winning project was one of three Florida Tech finalists, which were selected by an internal committee, including Provost John Z. Kiss, professor Kunal Mitra and associate professors Andrew Palmer and Brooke Wheeler. The two runners up were:

"HOW DOES MICROGRAVITY AFFECT PROTEIN DEGRADATION IN METABOLISM"

By Kaden Block, Brooke Mortillo, Olivia Weaver and Conner Cadenhead

Would study the effects of microgravity on metabolic processes

"PRISMAA: PREBIOTIC RNA INCLUSION STUDY IN MICROGRAVITY FOR ASTEROIDAL ANALOGS"

By Emilio Lugo and Allona Yehiav

Would explore the possibility of RNA transfer via asteroid

Prime is a quantity.

Unique, a product unachievable by any two other numbers. 2, 3, 7 ...

Prime is a quality.

Excellent, of the highest caliber. *Outstanding, Choice, Top-Notch...*

In both quantity and quality, this column features Prime Examples of what makes us Florida Tech.

PRIME EXAMPLES *of* INFLUENCE

To be influential is to make an impact. To have an effect on something or someone. To inspire. Strong enough influence can leave impressions, convictions that outlast individuals. It is not about prestige or control, but leadership and value. Opinions, behavior, relationships, community—intentional or not, our influence shapes them. At Florida Tech, influence matters. It is our power to guide, cultivate, make a difference.

Here are a few prime examples.

3 NEW LEADERS



SAMBANDAMURTHY "MURTHY" GANAPATHY

Dean, College of Engineering and Science

An internationally recognized scientist working at the intersection of material science, quantum physics and interdisciplinary research, Ganapathy comes to Florida Tech from the University at Buffalo, where he served as associate dean for research in the College of Arts and Sciences and as interim director of the Quantum Institute.



LESLIE MATUSZEWICH

Dean, College of Psychology and Liberal Arts

Matuszewich comes to Florida Tech from Northern Illinois University (NIU), where she served as senior associate dean for research and graduate studies in the College of Arts and Sciences. As a faculty member in NIU's Psychology Department, she focused her research on the effect of stress on motivated behavior and dopaminergic systems in the brain.



AMY L. ADAMSON

Associate Provost for Research and Chief Research Officer

With over 25 years of experience in higher education, Adamson has dedicated her career to fostering academic excellence, promoting research and enhancing student success and access. Most recently, she served as associate dean for research in the College of Arts and Sciences at the University of North Carolina, Greensboro, where her scholarly work has focused on the molecular interactions between Epstein-Barr virus and human cells, particularly how the virus initiates intracellular changes that can trigger metastasis.

3

EVENTS WITH IMPACT

FREE SPEECH WEEK

Sarah McLaughlin, a senior staffer at the Foundation for Individual Rights and Expression (FIRE), delivered the keynote address for Florida Tech's 15th annual Free Speech Week in February. Hosted by Panther Media Group's student-run media organizations, Free Speech Week featured themed events, such as a "free speech wall" demonstration outside of Denius Student Center and the week's signature "Live Free or Eat Free: You can't do both," offering free pizza to participants willing to give up their First Amendment rights.

MARTIN LUTHER KING JR. COMMEMORATION

On Jan. 20, the campus community reflected on the transformative power of courage and community at the annual Martin Luther King Jr. Commemoration, which featured a keynote address from **RAMONE HEMPHILL SR.** '22 MBA, an engineer and advocate for connecting young people to opportunities in aviation and aerospace through his nonprofit, The 99th Squadron. The event also included presentation of the Dr. Julius Montgomery Pioneer Award to Benjamin Cain, founder, owner and publisher of *Ebony News Today*, Investing in Your Health Today and the *Ebony News Today* TV Streaming Network Expansion; and the Rev. Harvey L. Riley Bridge Builder Award to Rodney Greene, a U.S. Army combat veteran and president of Brevard Veterans Coalition.

AN EVENING OF HOPE

Themed "Hope Blooms," the 18th annual An Evening of Hope event benefiting The Scott Center for Autism Treatment brought together supporters from across the Space Coast April 11. Proceeds from The Scott Center's most meaningful event of the year support its mission to provide early intervention services for children on the autism spectrum, assist families in need and offer experiential learning opportunities for Florida Tech graduate students in applied behavior analysis programs.

3

MOTIVATIONAL MUSINGS

“What makes Florida Tech particularly well-suited for this space is our ability to operate at the intersections that matter most. We bring together engineering, autonomy, aviation, policy awareness and workforce development in one single environment.”

— President John Nicklow at February's Florida Advanced Air Mobility (AAM) Pitch Day event, a remarkable gathering of visionary state and education leaders, entrepreneurs and stakeholders at Vertex Applied Innovation Hub. The event featured presentations from 10 high-growth companies advancing AAM, drones, uncrewed aerial systems and dual-use aviation technologies, such as platforms, software and enabling infrastructure.

“I want you to remember that as you pursue the third wave of innovation, what might sound crazy today might one day become so much a part of our daily lives that we forget about what life was like without it.”

— Retired Maj. Gen. Timothy Sejba, special assistant to the vice chief of space operations and former STARCOM commander, during his F. Alan Smith Distinguished Lecture Series presentation, "Three Waves of Space Force-Led Innovation: Transportation To, In, and From Space," in February.

“When Black students see professionals who look like them excelling in science, technology, engineering and math, it shows them that they belong in those spaces and that they can accomplish whatever they want.”

— Black Student Union representative Rachel Velazquez regarding the organization's February Black in STEM Celebration that honored Black excellence, innovation and representation in STEM fields and featured a panel discussion, as well as a gathering of local vendors, games and food trucks.



Grit Beyond Grades

Win or lose, students who participate in academic competitions earn life's most essential credits: teamwork, toughness and tenacity.

By Trey Avant



On a hot Sunday afternoon at Valkaria Airport, Brian Williams stands at the edge of the runway with a tape measure in hand. His teammates are lined up beside him in safety vests, chalking the landing line they've drawn across the asphalt.

It's a practice session, the kind the Florida Tech Flight Team holds nearly every week to prepare for the Safety and Flight Evaluation Conference (SAFECON).

Moments later, a Piper Warrior aircraft dives toward the line, engine humming, nose flaring just inches above the ground. The wheels touch. Six feet short. Williams nods.

"That's good," he says quietly, writing down the number.

The pilot taxis back, ready for another pass.



Page 18, top: ASCE Student Symposium; top middle: IACBE Student Case Competition; bottom middle: Airport Planning Design and Construction Symposium participants; bottom: Flight Team; Page 19, top left: Global Scaling team; middle left: Flight Team; bottom left: Flight Team; top right: Northrop Grumman Engineering and Science Student Design Showcase; bottom right: Esports and Behavioral Performance Coaching staff



Scenes like this—students learning from the trenches, preparing not for exams but for life—happen across campus year-round.

They are building bridges meant to withstand thousands of pounds of stress, presenting business cases to panels of executives, applying behavioral science to competitive athletes and cracking cybersecurity challenges designed by professionals who want them to fail.

The standard, in every case, is not set by a rubric. It is set by a judge who doesn't know them, a clock that doesn't stop or an opponent who is preparing just as hard.

Florida Tech students don't just study. They compete. And in the process, they learn.

The Gold Standard

Stand in the Clemente Center during the Northrop Grumman Engineering and Science Student Design Showcase, and you'll see what that looks like at scale.

More than 230 capstone projects fill the gym floor, each defended by the students who built it. The judges—industry professionals, not professors—move between stations, asking questions the rubric didn't prepare anyone for.

FELIX GABRIEL '22, '25 M.S., knows the showcase from the inside out. He competed as a student. Then, as a lab manager in the L3Harris Student Design Center, he worked alongside his team to support students as they developed their projects year-round.

"As a student, I wondered, 'Why would they bother talking to me—a random 22-year-old presenting his

project?'" Gabriel says. "I eventually realized, they're just scientists, engineers and professionals in the field who actually care about the work and genuinely enjoy it."

Their questions were hard, but Gabriel quickly realized they weren't meant to trip him up. Judges challenged his design choices, asked why certain approaches weren't considered and, when satisfied with his answers, offered alternatives.

They were brainstorming out loud alongside him. They cared about his work—something Gabriel had not expected, he says.

That dynamic—external stakeholders evaluating student work against professional standards, not academic ones—drives the Bisk College of Business' approach to competition, as well.

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Instructor Tim Muth organizes and advises students in many of the intercollegiate business case competitions they participate in.

In these competitions, like the Global Scaling Challenge or IACBE (International Accreditation Council for Business Education) Student Case Study Competition, teams act as consulting firms charged with solving actual problems facing real companies, developing and presenting their recommendations to a panel of judges that often includes representatives from the company for which they are “consulting.”

“When you’re on a stage presenting to real companies, real executives and leaders in their fields, you face the possibility of losing your credibility as a professional,” says Meghan Walker, an information systems senior. “It feels like you have your career at stake rather than just your grade.”

And that, Muth says, is the point.

“The students can play us; they can’t play the judges,” he says. “The term I use with students is ‘an actionable and realistic plan.’ ... In school, students can put all sorts of unrealistic things into a project, and we often let it slide. But in competition, the judges won’t let it slide.”

Competition Is the Classroom

Not all of Florida Tech’s competitive academics happen outside the classroom. For some students, competition is embedded in their courses.

Through X-Culture, Muth’s International Business course doubles as a global competition. Over eight weeks, Florida Tech students are placed on virtual teams with peers from universities across the world, tasked with solving real problems for multinational clients.

The teams are international by design: a deliberate friction that forces students to navigate cultural differences, time zones and communication barriers while still delivering professional-grade work.

The best performers are invited to the X-Culture Global Business Week,



an international symposium where top students from around the world compete in live case competitions for real companies.

“X-Culture is all about international cooperation,” said Muth, who is a part of X-Culture’s global leadership team and helps coordinate the business challenges.

In the College of Aeronautics, **DEBBIE CARSTENS** ’96 MBA builds the same principles into her Human Performance 1 course.

Her students compete in the Airport Cooperative Research Program (ACRP) University Design Competition, a national competition, administered by the Transportation Research Board and sponsored by the National Academies and the Federal Aviation Administration, that asks teams to develop design solutions enhancing safety and efficiency in airport operations and the National Airspace System.

Teams spend the entire semester on a single project, moving from brainstorming through research, prototyping and cost-benefit analysis. Carstens has run the course this way for a decade.

“Learning is far too often theoretical for students,” she says. “This project provides them with a way to apply classroom concepts to the real world.”

“Learning is far too often theoretical for students. This project provides them with a way to apply classroom concepts to the real world.”

— Debbie Carstens



Top left: Northrop Grumman Engineering and Science Student Design Showcase; top middle: AISC steel bridge team; top right: ASCE surveying team; bottom middle: X-Culture participants; bottom right: FITSEC cybersecurity competition team

Pass or Fail

For T.J. Boylan, a civil engineering senior and president of Florida Tech's American Institute of Steel Construction (AISC) student chapter, the stakes are structural.

He spends months each year preparing for the annual AISC Student Steel Bridge Competition, for which he and his team must design and fabricate a scale steel bridge that survives real load testing.

The finished structure spans roughly 22 to 24 feet and carries 2,500 pounds applied across multiple vectors, with tolerances measured in fractions of an inch.

A bridge that deflects more than a quarter of an inch during loading fails.

One that exceeds its length limit by more than half an inch is disqualified. Before any of that, the bridge must pass a comprehensive judge's inspection—every bolt checked, every measurement verified.

The fabrication process is a test of its own. Team members use bandsaws, angle grinders and welding equipment. The work runs late into the night. But when fatigue sets in, quality drops and the risk of injury rises. Regardless, on competition day, there is no partial credit for effort.

"When the judges come around, it's pass or fail," Boylan says. "It has to be 100%. There's no room for error. ... In real life, if you're designing a bridge and you're wrong, people could die.

So, everything becomes a life-or-death scenario."

The competition floor is a preview of the profession, he says.

"Students from other universities become competitors in the job market. It's like multiple companies in a bidding process, where five people submit a bridge design, and my bridge has to be better than your bridge in order to get the job," Boylan says.

For FITSEC, Florida Tech's cybersecurity competition team, the stakes look nothing like steel and load ratings. But the pressure is just as real.

Members compete in capture the flag competitions: timed events where teams work through cybersecurity challenges to find hidden strings of data, called

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flags. Challenges span categories, including cryptography, open-source intelligence, reverse engineering and binary exploitation.

“Preparing for a competition is doing competitions. That’s the best preparation you’re going to get,” says Maria Linkins-Nielsen, a computer science senior and FITSEC vice president.

Many of the skills competition demands are never taught in class. The best way to develop them is exposure—entering every competition available, on any platform, at any hour, she says.

“The best part of competing is that while you’re doing it, you can still learn,” says Jaylin Ollivierre, a computer science senior and FITSEC president. “Competition is different because you can take everything you’ve learned, collaborate with others and keep learning as you go.”

Better Together

There is a misconception about competitive environments: that they produce individuals, not teams. That the drive to outperform creates friction rather than cohesion. For students at Florida Tech, however, success depends on teamwork.

Leaning into that notion, the School of Behavior Analysis has partnered with Florida Tech’s esports teams through the Behavior Performance Coaching program (BPC), a branch of the

Experimental Analysis of Behavior, Economics, and Esports with Kaitlynn (EEEEK) Lab, led by assistant professor **KAITLYNN GOKEY** ’12 M.S., ’20 Ph.D.

Through the program, behavior analysis students, known as performance coaches, serve alongside esports coaches, observing matches, collecting data and working to develop specific, measurable skills in players and coaches alike.

“Operant learning says we learn by doing,” Gokey says. “That means if you want people to perform well in competitive environments, you have to throw them into a competitive environment.”

For her students, that means working in an environment they cannot fully control—one that is unpredictable, fast-moving and unlike anything a clinical setting provides.

“It usually starts with us watching a practice match or a competition, and we pay attention to behaviors that impact what we want to work on,” says master’s student Adrienne Lafond, performance tech for the Valorant teams. “Some of the common things we look at include communication, how players respond to coach feedback, what happens after a mistake and how they handle pressure. We take notes and track those behavior patterns.”

Gokey’s team has noted improvements in communication—players talking more when it matters, less when it doesn’t—

along with fewer self-deprecating remarks during matches, better sportsmanship and greater receptivity to feedback. Surveys asking players whether they found the training helpful came back nearly perfect.

“They’re definitely making gains, because the data shows they’re making gains,” Gokey says.

The program is producing results and breaking new ground in the process.

“No other school is doing this, so it’s not like we have established research articles to reference outside of our own work,” says doctoral student **ALYSON INTIHAR** ’23 M.S., performance coach for the Overwatch teams. “That means we have to rely heavily on the application piece. It’s extremely valuable for real-time application. I’ve learned so much.”

The Thing About Losing

For many students, some of the most valuable lessons come from the moments when things go wrong.

SAFECON, hosted by the National Intercollegiate Flying Association (NIFA), spans more than a dozen events across two days, testing pilots in everything from short-field landings and power-off approaches to aircraft recognition, navigation and simulated instrument flight. Every fall, the top three teams from each regional competition advance to nationals in the spring.

When the Flight Team finished fifth at regionals in 2023, there were tears.

“I told myself, ‘Next year, things will be different. This won’t happen again,’” says Williams, an aviation management with flight senior and Flight Team captain.

The following spring, another school declined its invitation to nationals. Florida Tech got in but finished at the bottom.

“You experience the lows, but you have to let yourself feel them. It’s part of being human,” Williams says. “We took the time to feel it. And then, the next question became, ‘How do we make sure we’re never here again?’”

Likewise, Florida Tech’s bridge broke during the aesthetics portion of the 2024 AISC Student Steel Bridge Competition. The team ran out of time



Florida Tech’s American Society of Civil Engineers student chapter participates in the concrete canoe competition at the 2019 ASCE Southeast Student Conference.

before reaching the timed construction phase. Their bridge, which would have been 50 pounds lighter than the winning entry, never got tested.

But their resilience did.

For Boylan, the cost of losing was proportional to the investment.

“When you bring back nothing, it’s very easy to feel defeated—like you’ve wasted hundreds of hours of your life and have nothing to show for it,” he says.

didn’t know it, but because we hadn’t practiced it and didn’t expect it to come up,” Knodel says. “Now, we have another thing we can work on throughout the year to be better prepared.”

The Value of Winning

Two years after finishing at the bottom, the Flight Team used that pain as fuel.

At regionals, they earned a third-place finish and automatic qualification

Walker credits her competition experience with helping her secure an internship at Vertex Applied Innovation Hub.

“In my internship, I do a lot of communication directly under our executive director. Presenting has really helped me not feel nervous when talking to her or asking for her opinions,” she says.

That confidence—not trophies—is what Muth always pushes his students to pursue.

“That’s what I always preach to them: You can do lots of different things—sports, clubs, anything—but you want at least one thing that sets you apart from everybody else,” Muth says. “And for them, this might be that thing.”

Beyond the Trophy

Competition gives students the chance to demonstrate their skills, build connections, face challenges that mirror real professional environments before they graduate and, sometimes, open the door to their next big opportunity.


At the Student Design Showcase, Gabriel has seen it more times than he can count.

“I’m of the opinion that showcase is the reversal of a career fair and that many of these companies use the showcase as a recruiting tool,” he says. “Everyone who attends brings job opportunities—or at least valuable connections.”

Employers understand that pressure is a teacher and that the students who seek it out leave better prepared than those who don’t. At Florida Tech, students don’t compete because they have to. They compete because it is part of who they are—and who they aspire to be.

It is on that signature spirit—serious, scrappy and relentlessly hands-on—that Florida Tech’s competitive culture is built.

“We’re not afraid of hands-on work. We’re not afraid of building a prototype. We’re not afraid of failure,” Gabriel says. “I think it’s simply who we are—it’s in Florida Tech’s DNA.”



“The best part of competing is that while you’re doing it, you can still learn. Competition is different because you can take everything you’ve learned, collaborate with others and keep learning as you go.”

— Jaylin Ollivierre

Alex Knodel, a civil engineering senior and president of Florida Tech’s American Society of Civil Engineers (ASCE) student chapter, knows that feeling, too.

Florida Tech’s ASCE chapter competes against other schools in a series of civil engineering challenges at the organization’s annual regional symposium, where first-place finishers in the main events earn a berth at the national championships.

Part of the symposium, the surveying competition requires teams to complete a series of timed field tasks—pacing distances, determining elevations and producing topographic maps—using the same tools and methods they’ll rely on in the field as engineers.

At the 2025 ASCE Civil Engineering Student Championships, the surveying team was undone by something deceptively simple: unit conversion. It was an unexpected requirement; a problem they hadn’t practiced for. And the mistake cost them.

“In the moment, it was pretty defeating because it was simple stuff that we were missing—not because we

for nationals. At the 2025 SAFECON National Aviation Championship, they came home with 14 medals and eight trophies.

“It was an incredible feeling,” Williams says. “The energy was high; the whole room felt lighter. The flight home, the drive home—everything was happier.”

One of the most memorable moments of Knodel’s college career came when her team placed first in the surveying competition at the 2025 ASCE Southeast Student Symposium.

“I can’t even express how excited and proud I was. I think that was the proudest I’ve ever been of a group of people in my entire life,” she says. “I’ve never felt closer to a team. It was an unreal experience.”

For Walker, placing third in the 2025 Global Scaling Challenge produced the same shift.

“It was really shocking because I didn’t think we were going to place at all. It definitely gave me more confidence in myself and in my ability to speak to high-level professionals,” she says.



Think Like a Professor. Live Like a Pro.

Florida Tech faculty share their hard-earned expertise to help you **live a better life**.

By Erin Peterson

Academic researchers often study niche areas in their fields, methodically and painstakingly building new knowledge in areas ranging from gastrointestinal diseases to aviation sustainability.

Not surprisingly, the habits of mind that make them good at their work don't disappear when they leave campus. The frameworks and knowledge they use in their work are often remarkably useful in everyday life.

To that end, we asked six Florida Tech faculty members to share how the thinking behind their research has shaped the way they approach everything from picking up a new hobby to shrinking their environmental footprint to designing a backyard.

Their advice is practical, specific and rooted in years of professional problem-solving. Best of all, none of it requires a Ph.D. to put into practice.

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I'm a **research scientist**. Here's how to ...
**USE THE SCIENTIFIC METHOD
TO LEARN NEW HOBBIES.**

Michelle Cherne, a biomedical engineering and science assistant professor, studies gastrointestinal infectious diseases using models of the gastrointestinal tract called organoids.

When Michelle Cherne wants to pick up a new hobby—most recently, banjo and oil portraiture—she doesn't idly noodle around or commit vaguely to a few minutes of practice a day.

Instead, she borrows a page from the scientific method she learned decades ago and still uses today.

"I want to figure out the best way to do things and to have a strategy for the fastest way to learn something and succeed," she says.

Here's how you can, too.

STEP 1: SURVEY THE FIELD.

Just as scientists survey existing research before launching a new study, Cherne starts her hobby-learning process at the library.

"It's hard to get accurate information on social media," she says. "I find way better stuff in print."

STEP 2: IDENTIFY CREDIBLE SOURCES.

In science, a study is only as strong as its methodology and the expertise behind it. Cherne applies the same scrutiny to the resources she selects for her hobbies:

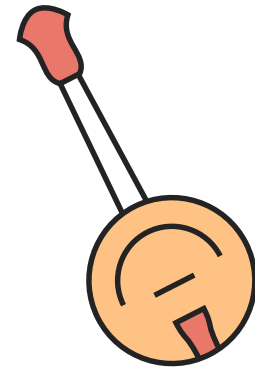
Are the sources she's found coming from established experts? Are they offering specific, actionable guidance rather than general descriptions? She knows that a well-targeted beginner's guide—like her beloved *Bluegrass Banjo for the Complete Ignoramus*—beats an advanced resource that would leave her flummoxed.

**STEP 3: DESIGN YOUR APPROACH—
THEN, PUT IT TO THE TEST.**

Scientific studies are conducted with specific reasons behind them—and Cherne says hobbies should be, too. Her banjo aim was to learn the instrument well enough to join a casual band. From there, she created an efficient practice strategy around that goal.

Cherne, who can now pick her way through the bluegrass classic "Long Journey Home," says her approach ensures that she makes meaningful progress on hobbies she loves.

With the scientific method, "you're not going around in circles as much," she says. "You become good sooner, with less frustration."



“I want to figure out the best way to do things and to have a strategy for the fastest way to learn something and succeed.”

—Michelle Cherne

I'm an **aviation sustainability researcher**. Here's how to ...
SHRINK YOUR ENVIRONMENTAL FOOTPRINT.

Brooke Wheeler is an associate professor in the College of Aeronautics whose research spans aviation sustainability and environmental sciences, including electric aviation.

Brooke Wheeler doesn't just research aviation sustainability—she lives it. As the owner-operator of a Cessna 172 Skyhawk, she's made modifications, including electronic ignition and tuned exhaust upgrades, which have reduced its fuel consumption by about 15%.

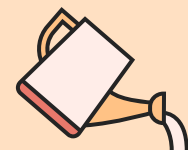
But that's just one of the ways she tries to be thoughtful about her environmental impact: She and her husband both own hybrid vehicles; they've effectively shifted their electricity toward renewables by buying into a solar plant through Florida Power and Light Co.; and they buy local, in-season food as often as possible.

The key to making a true impact as an individual, she says, is to consider your total resource use systematically.

"When we do an ecological footprint analysis in my class, we look at transportation, the flights you take for vacation, whether you live in an apartment or single-family home, and where you get your electricity," she says, ticking off a handful of the variables her students investigate.

You can't change everything, so look to the areas you might have more control over.

"There are a lot of things we can do to move the needle to decrease their resource use," she says.



I'm an **accidental academic**. Here's how to ...
SOLVE ANY PROBLEM MORE CREATIVELY.

Marshall Jones is an assistant professor in the School of Psychology and director of the Center for Applied Criminal Case Analysis. He brings his expertise as a practitioner and academic to work on challenging problems linked to sexual assault and kidnapping for organizations, including the FBI.

Marshall Jones spent more than a decade in law enforcement before landing in an academic role, a winding path that shaped how he tackles complex problems today. Moving between the field and the classroom taught him that the best solutions

MINDSET 2: BE RELENTLESS.

When Jones wanted to study long-term outcomes for individuals who started offending as juveniles, he knew he'd come up against roadblocks. But with the help of a handful of student workers and 18 months of work that

“If you have a curious mind, you can pursue unique opportunities.”

—Marshall Jones

rarely come from following a standard playbook. Instead, they come from a set of mindsets that lead to progress on problems many might consider too messy or too difficult to pursue.

MINDSET 1: AVOID ASSUMPTIONS.

A big problem in applied criminal justice research is letting preconceptions drive analysis. The best researchers know that what seems obvious at first glance often isn't.

For example, while Jones and other researchers were studying sexual assault in Indian country, they were flummoxed by the high percentage of uncles involved in such assaults—but nuances in language helped uncover the answer.

“In a tribe, an uncle is not necessarily a brother of your mom or your dad—it's a cultural uncle,” Jones says.

The term simply cast a wider net than researchers had assumed.

If you want to get to the truth, Jones says, “set everything you think you know about a topic at the door.”

included navigating databases across 38 states, he and his collaborators ultimately tracked the criminal careers of those juvenile offenders over the course of 25 years.

“It can be mind-numbing,” he admits. “But if you have a curious mind, you can pursue unique opportunities.”

MINDSET 3: INVITE ADVERSARIAL PERSPECTIVES.

It's easy to want to work with people who share your view of the world—but that often doesn't lead to the best results, Jones says.

“Collaborate with people who don't see things like you do,” he says. “You need a devil's advocate, because it's in that intentional conflict of ideas that you get the good stuff.”

Creative problem-solving, he says, comes down to a willingness to challenge yourself at every turn.

“Don't let conventional models, methods or techniques limit you in seeking an answer.”



I'm an **astrobiologist**. Here's how to ...

USE SCALE TO GET PERSPECTIVE ABOUT YOUR OWN LIFE.

Manasvi Lingam, an assistant professor in the Department of Aerospace, Physics and Space Sciences, studies astrobiology, planetary habitability, biophysics and space exploration.

To calculate the probabilities of life in the universe, astrobiologists don't spend much time on the here and now. They think about timespans of billions of years and distances of trillions of miles to imagine what is possible.

Manasvi Lingam says you don't need a specific conviction about alien life to recognize humanity's fragility.

“In my work, you appreciate how many factors have to align,” he says. “We could have had just a little less water, or we could have been a little too close to or far from the sun—everything would have changed.”

While he admits it can be humbling to grapple with humanity's relative insignificance in the vast universe, he also finds it profoundly moving to be part of a species that has come so far.

“Are we small and negligible? That's one way to look at it. But it's also true that we have learned and done so much in this world. We have electricity and heating; we have cars and planes; and we have science, which enables us to understand something about what happened 13 billion light-years away, back when the universe was a baby. We are tiny. But we have made so much headway, and I think that is beautiful.”



continued on page 29



I'm an **ecological engineer**. Here's how to ...

DESIGN THE BACKYARD OF YOUR DREAMS.

Emily Ralston is a research assistant professor in the Department of Ocean Engineering and Marine Sciences.

Emily Ralston has been at Florida Tech for more than 20 years. But in a way, the problems she tackles have always been the same.

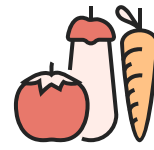
"I'm always asking the question: Why do things end up where they are?" she says.

In her research, it means she studies why marine organisms colonize certain surfaces, such as boat hulls and pilings, where we might not otherwise want them.

What she's learned is that the answer is surprisingly straightforward: Things end up where they are because the environment is designed for it.

The flip side of that idea is also true: Design the right conditions, and what you want will follow. It's an insight that Ralston has applied relentlessly to her own yard.

Her quarter-acre plot is a vibrant space packed with rows of vegetables, a small grove of fruit trees and herbs. Her plantings attract an abundance of butterflies and bees, cardinals and kestrels, squirrels and rabbits. It didn't happen by accident—she designed her environment in ways that, essentially, guaranteed it.



Here's how she's made it work.

START WITH YOUR LARGER VISION.

If you know what you want, you can make sure every decision reflects that larger goal, Ralston says.

"Before I put anything in my yard, I ask: Does it provide food for me? Does it provide food for the pollinators? Does it provide food for wildlife?"

She wants to answer "yes" to at least one—and, ideally, all three—of those questions.

PRIORITIZE NATIVE SPECIES.

Unlike their non-native counterparts, native species are often more likely to survive an area's extreme weather conditions—and thrive in more-typical weather.

"Most of our plantings came through this year's freeze just great," she says.

DON'T BE AFRAID TO TRY SOMETHING UNUSUAL.

While Ralston likes to grow many common fruits and vegetables—mangoes and avocados, lettuce and peppers—she doesn't shy away from a few unexpected varieties.

"We grow Asian long beans that are almost a yard long and purple garden beans that are sweeter than green beans," she says. "You don't just have to plant what you would find in a typical grocery store."

I'm an **accounting expert**. Here's ...

WHY NUMBERS ARE NEVER THE POINT.

Phyllis Okrepkie is a visiting assistant professor in the Bisk College of Business.

When Phyllis Okrepkie started her work in accounting, she saw the world in black and white: debits and credits, dollars and cents.

But over the course of a career that took her from an adjunct faculty member teaching 30 students to the president of an accreditation organization serving 200 member schools, she came to internalize an essential truth about any financial spreadsheet: It can never truly tell you what's important.

"We may be taught in business school that what increases the bottom line is a good decision, and what decreases the bottom line is a bad decision," she says. "But there's a lot that's not quantifiable. There's always a bigger picture."

It's an insight that might sound obvious, but it has major implications for the way businesses, or any of us, weigh a decision.

When a company considers closing a location, the spreadsheet might say it's a smart move, but that analysis misses what can't be quantified, like the jobs

lost in a community and the reputational damage to the company when people feel abandoned, Okrepkie says.

"It's important to think holistically," she says.

Once adopted, it's a mindset that's hard to leave at the office. Okrepkie says that shift changed the way she sees

"When I look at the bigger picture, I realize that what I'm doing impacts the entire environment: the Indian River Lagoon, the ocean, everything," she says.

She tries to pass these lessons along to her students.

"You can be a bean counter, and that's all you do—count the numbers,"

“You can be a bean counter, and that's all you do—count the numbers. Or you can look at how the numbers impact people, community and everything else.”

—Phyllis Okrepkie

something as simple as lawn care.

The old, black-and-white accounting mindset would have said: It's my property; I'll fertilize and spray as I see fit. But thinking more broadly, she realized that the choices she made for her own yard rippled beyond it.

she says. "Or you can look at how the numbers impact people, community and everything else."

The bottom line, she's found, is never really the bottom line.

Louder Than Words

Florida Tech’s Court Assessment Team teaches future forensic psychologists that the quietest clues often say the most—and that hands-on experience speaks volumes.

By Karly Horn

“Who is your favorite Harry Potter character?” is not a question listed in any of the assessments **PAIGE SCIERA** ’24 M.S. was trained to administer during a criminal forensic psychology evaluation.

It did, however, light up the defendant’s face and coax his guard down enough to participate in her assessment, which resulted in a clinical diagnosis that connected him to the resources he needed and, ultimately, changed his life.

A fourth-year clinical psychology Psy.D. student, Sciera is well-versed in the proper procedures and protocols necessary to conduct a thorough and accurate evaluation. She also knows that many of the most illuminating, impactful findings don’t come from asking the right questions—or even eliciting the right answers.

They are in the nuance: observing behavior, noticing small details—like a police report reference to a Harry Potter fixation—and knowing when to pivot with patience and kindness. In this line of work, actions—a glance, a breath, a blink—truly speak louder than words.

That insight, she says, comes from School of Psychology head Julie Costopoulos and the firsthand, real-world experience she gained as a member of Florida Tech’s Court Assessment Team (CAT).



Court Assessment Team members in a Brevard County courthouse. From left: Katherine Plescow, School of Psychology head Julie Costopoulos, Bella Stine, Kayla Goldberg, Brittany Bagenstose, Sophia Rougraff.

Where Observation Meets Opportunity

The Court Assessment Team is a practicum group of clinical psychology Psy.D. students who evaluate Brevard County criminal defendants for forensic mental health issues.

Crafted and directly supervised by Costopoulos, the team prepares for and conducts the evaluations, then co-authors the final reports to the court.

“The purpose of a competency evaluation is to protect a defendant’s rights, so they aren’t proceeding to trial when they are not mentally present or held responsible for behavior that was

actually the product of mental illness,” Costopoulos says. “It’s actually a very positive, protective purpose.”

Costopoulos created CAT in 2020, when the Brevard County Jail practicum site shut down due to the COVID-19 pandemic—a move that posed two problems: The existing shortage of mental health professionals swelled to new levels, and doctoral students could no longer gain the practical experience required for applying to internship programs, the typical next step.

CAT alleviated both.

While the need for more local mental health professionals remains, Costopoulos and her team have

lightened the workload. In its six years, the team has served roughly 100 defendants in the Brevard County court system who otherwise could have been lost in the backlog.

But the team's stellar reputation in the community comes less from quantity than quality.

"In my opinion, defendants get a more thorough evaluation from us because we can afford to take our time," Costopoulos says. "Three hours of testing plus 10 hours of writing—that's a lot of work. But we choose to do it because it's beneficial to the case, and it's beneficial to the students doing the work."

Proof in Practice

Each semester, four or five students enroll in the CAT practicum, typically in their third or fourth year, once they have completed prerequisites, such as Costopoulos' Forensic Assessment course.

When a judge or an attorney appoints Costopoulos to a case, she and two CAT students begin poring over existing records—police reports, prior arrest records, Department of Children and Families reports and more—to determine what kinds of mental health issues they may be dealing with and which tests they'll likely need to administer.

Then, they meet the defendant for evaluation, often at the jail.

"For many students, it's their first time in a jail, and it's really neat to nurture them through being safe, being cautious and being a comfortable professional," Costopoulos says. "To be effective, they need to be all the things psychologists are: nurturing, kind, supportive and clear. Putting those together can be a challenging balance for new professionals."

During the evaluation, the three take turns conducting a mix of clinical interviews and diagnostic, intelligence and forensic tests involving verbal, written and motor-related exercises. The assessments help determine factors such as competency, sanity and intentional symptom fabrication or exaggeration, called "malingering."

As the semester progresses, students take on increasing responsibilities.

They learn to think on their feet, communicate nonverbally and redirect when necessary—lessons that words in a book or a classroom cannot proportionately communicate, Costopoulos says.

The pace can be swift, and often, defendants are not particularly pleased to participate. Whether by choice or due to severe mental illness, at times, they simply don't.

"One thing that I was surprised by was how much information you can get from just observing," says **HAYLEY RODRIGUEZ** '19 M.S. '22 Psy.D., one of CAT's first two students who helped build the program. "I learned so much from just watching the scene and applying that into a court report."

After concluding their assessments and completing corroborating interviews with victims, witnesses, caretakers, treating physicians, jail deputies and others, Costopoulos and the students divvy up sections and write the report, collectively diagnosing and rendering opinions.

Then, they *all* sign it.

"There aren't a lot of other practicum sites or other universities that allow you to put your name on court reports as a student," Sciera says. "Getting that kudos, that name credit, definitely drew me to Florida Tech over other programs."

Experience That Speaks for Itself

Sciera isn't the only one.

In fact, the Court Assessment Team, with its faculty-led, hands-on education, is frequently cited by prospective students as a main reason for their application and is consistently described in course evaluations as the single most important training experience during students' time at Florida Tech.

"I don't think I would have matched at the internship site that I did had I not had the Court Assessment Team experience," Rodriguez says. "I had so many hours of testing, court report writing and direct interview experience—it was a huge advantage."

Today, Rodriguez works for the state hospital system in California as a senior

“The purpose of a competency evaluation is to protect a defendant’s rights, so they aren’t proceeding to trial when they are not mentally present or held responsible for behavior that was actually the product of mental illness. It’s actually a very positive, protective purpose.”

— Julie Costopoulos

psychologist specialist, writing court reports for people who have been found incompetent to stand trial.

"The biggest lesson I learned from Court Assessment Team was how much of an impact the work we do has and how strong of a voice mental health professionals play in the legal setting," she says.

Sciera recently matched for her internship with the Wisconsin Department of Corrections, where she'll spend the next year before graduating from Florida Tech in May 2027.

"Court Assessment Team has helped with my professional, clinical and even personal development so much, and for several different reasons," she says. "It's definitely a multifaceted, fantastic opportunity."

A MESSAGE FROM THE FLORIDA TECH ALUMNI ASSOCIATION

Summer has officially arrived at Florida Tech, and the campus is buzzing with that familiar warm-weather energy!

As we settle into the season, I've been reflecting on what an incredible spring we just experienced together.

From the powerful Martin Luther King Jr. Commemoration to the incredible generosity shown during 37 Hours of Giving, the Panther spirit was truly on full display.

We celebrated excellence at the WISE Awards, gathered for An Evening of Hope and witnessed innovation come alive at the Northrop Grumman Engineering and Science Student Design Showcase. And of course, we wrapped up the semester by sending our students off in style with a memorable Grad Bash.

All these moments beautifully showcased the passion, pride and community that define Florida Tech. We then capped off the season with spring 2026 commencement, and what an unforgettable ceremony it was.

Congratulations to our newest graduates! We are thrilled to officially welcome you into the Florida Tech alumni family. As you begin this next chapter, remember to stay connected by joining Florida Tech Connect and keeping us updated on your personal and professional

milestones. Share photos, send us your latest news and come back to visit campus whenever you can. Once a Panther, always a Panther!

And while summer is just beginning, we're already looking ahead to one of the most exciting times of the year: **Homecoming. Mark your calendars for Oct. 18–24** now, because you absolutely won't want to miss our signature celebration: the Alumni Awards Gala, which just so happens to be my favorite event of the entire week.

Homecoming always overflows with energy, reunions and Panther Pride—but the Alumni Awards Gala truly shines as the highlight. It's the perfect chance to dress to the nines, reconnect with fellow alumni and honor Panthers who have been recognized by their colleges and the Alumni Association for their outstanding achievements. It's an unforgettable night every single year.

Stay tuned for more Homecoming details, and start planning now. We can't wait to celebrate with you this fall!

Yours,
Sherry Acanfora-Ruohomaki
'93, '00, '05 M.S.
FTAA President



YOUR ALUMNI ASSOCIATION OFFICERS

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'93, '00, '05 M.S.
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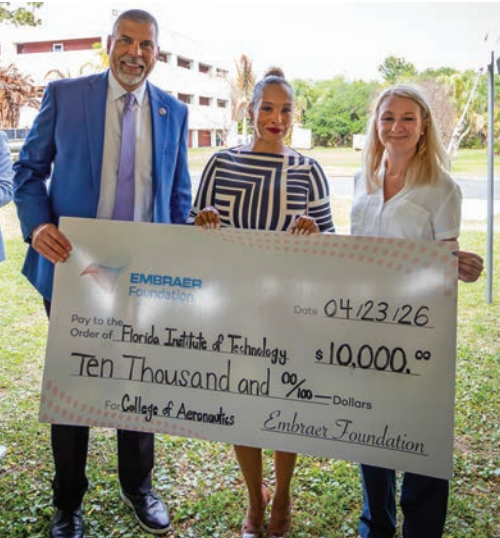
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Aeronautics Week

In April, Florida Tech's College of Aeronautics (COA) hosted its second annual Aeronautics Week—an exciting event that brought together hundreds of students, alumni and industry leaders for a dynamic week of learning, networking and celebration.

The week kicked off with a keynote presentation from Scott "Intake" Kartvedt of the Blue Angels Foundation, and later events included discovery flights, alumni speakers, a networking reception on Crawford Green and the Northrop Grumman Engineering and Science Student Design Showcase, where COA students presented their applied research and projects, highlighting their analysis, problem-solving and industry-relevant insights.

"I'm delighted with the continuation of our Aeronautics Week events. Each year it gets better and better, with more student and alumni participation," said COA Dean John Deaton. "It was my honor to bring back this tradition, and we are already planning for next year's event—stay tuned!"



37 Hours of Giving

Thank you to everyone who participated in our annual 37 Hours of Giving in March. Whether you gave, shared the mission, rallied others or simply cheered us on, your involvement has touched lives, fueled dreams and empowered our students to succeed.

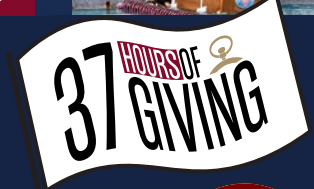
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12

PANTHER PADDLE TEAMS



INDIAELLA

KEMM-PINEIRO '19 serves as a brigade future operations (FUOPS) officer with the U.S. Army, where she helps guide forward operational planning and long-range strategic initiatives essential to mission success.

In this role, she works closely with leadership to align resources, anticipate operational needs and apply advanced project management practices that support seamless transitions across rapidly changing military environments.

Her journey to this point, however, began long before her Army career—back at Florida Tech, where she found both opportunity and community.

“What first drew me to Florida Tech was the size of the school,” Kemm-Pineiro says. “I loved that it offered a smaller, more intimate experience compared to a large university. The Army ROTC program was also a huge factor in my decision.”

ROTC provided the foundation she relies on today, balancing academics, leadership training and extracurriculars—including membership in her sorority, Gamma Phi Beta, where she built lasting friendships and a community outside of ROTC.

“It was challenging, but it absolutely set me up for what I’m doing now.”

Today, that combination of discipline, community and academic rigor informs Kemm-Pineiro’s leadership in the Army.

“Within my role, I oversee the planning for our brigade’s training exercises,” she says. “My role centers on coordinating and preparing large-scale training events that keep our units sharp, ready and mission-effective.”

With experience as both an observer coach/trainer, battle captain and battalion operations officer, she helps refine operational strategies and strengthen military leadership. Her emphasis on collaboration, precision and readiness ensures units are prepared to execute complex missions with confidence.

“One of the biggest challenges I’ve faced in my career is managing the number of tasks that come our way,” she says. “I’ve learned to take things one day at a time and make space for self-care so I can consistently put forward my best work.”

A standout moment in her Army career was competing in the 120th Infantry Brigade Best Observer, Coach Trainer (OC/T) Competition—a demanding blend of physical and knowledge-based challenges. As one of the first women to participate, she views it as a meaningful milestone and a moment of great pride.

Kemm-Pineiro aims to become a major and, eventually, take command of a company—goals she is steadily working toward with the same dedication that carried her through Florida Tech and into her military career.

—Erin Alvarado '16

**SPOTLIGHT ON**

Indiaella Kemm-Pineiro

FLORIDA TECH CONNECTION: '19 B.S. interdisciplinary science, military science option

SURPRISING FACT ABOUT YOU: I'm afraid of heights but have gone skydiving multiple times.

FAVORITE TRAVEL DESTINATION: Portugal

1970s

1 HAROLD “HARRY” MCGINNIS '71, '73 M.S., Ph.D., was recently appointed to the editorial board for the *Space Sciences Journal* and the *Journal of Thermodynamics Research*. Over the past two years, he has published articles on lunar settlement governance, lunar land use, lunar transportation technology and organizational analyses of NASA and the U.S. Space Force.

1980s

2 DOROTHY CLEGG '80 A.S., '81, **LISA WYCKOFF SALUCK** '80 A.S., '82, and **JOYCE TRUHAN CLARK** '82 recently reunited in Hawaii to celebrate Clegg’s retirement after more than 40 years as a pilot with Continental/United Airlines. Clegg, who ended her career flying the 787 Dreamliner, now lives in Hawaii Kai on Oahu. Clark is retired from her 33-year career as a principal environmental specialist in California, and Saluck is retired from a career in market research in Satellite Beach, Florida. The former roommates cherish their Florida Tech days and look forward to future adventures together.

MAUREEN G. MANN '84 M.S., '85 M.S., is a nationally recognized health care leader who serves as vice president of the Lynn Cancer Institute and Lynn Women’s Health and Wellness Institute at Baptist Health South Florida. She has more than two decades of impact in oncology and community health, contributes to national initiatives, such as the White House Cancer Moonshot, and serves as chair of the American Cancer Society Cancer Action Network Board.

3 FRED GRIEGER '85 and **LOGAN SWEENEY** '19—two generations of Florida Tech alumni—were recently photographed together at Advanced Thermal Batteries (ATB),



areas such as best practices, compliance records and assets under care.

5 RYAN MEYER '07 was awarded the 2026 AAAE NEC Aviation Excellence Award. Meyer serves as the director of planning and programming at Lehigh-Northampton Airport Authority in Allentown, Pennsylvania.

2010s

GAELE BRIS '11 MSA and **LOUP-GIANG NGUYEN '19** MSA co-lead a research project focused on enhancing airport access with emerging mobility along with contributors and fellow Panthers, **KARLA MEDINA '22** and **JOSHUA SATTAN '24** MSA. Their team was recognized by WSP, a leading engineering and professional services firm, with a Global Excellence Award in Technical Excellence for their work on aircraft innovation and airport compatibility.

6 DARREN L'APPANNA '11, '13 MSA, received the Business Travel Science Award from the Global Business Travel Association (GBTA) at a leadership summit in Miami. He serves as the

where they now work side by side. Grieger serves as CEO, and Sweeney leads ATB's NDT & Test department. Despite graduating more than 30 years apart, they've built a strong connection through shared Panther Pride.

2000s

CHRIS FERNANDO '02 joined VHB as the regional aviation director for the mid-Atlantic, bringing more than two decades of aviation planning, environmental policy and emerging technology knowledge to support projects across the East Coast from his base in Raleigh, North Carolina.

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MARTHA WILLIAMS '03 Ph.D. was recently inducted into the William Carey University 2025 Hall of Fame, a recognition honoring her exceptional accomplishments and impact. Williams began her academic journey at the university at just 16 years old and completed her degree by 19, marking the start of a distinguished career that continues to inspire.

RYAN HALONEN '04, an ocean engineering graduate, has spent the past

five years co-developing innovative acoustic-release "pop-up" gear that helps protect migrating whales while supporting sustainable crab fishing. His company, PUPFish, was recently featured on CBS News.

4 ALTAIR S. WATSON '06 MAT of Melbourne, Florida, was named to the 2026 Forbes!SHOOK® Top Women Wealth Advisors Best-in-State list. The ranking recognizes successful financial advisors who are leading the way in

continued on page 36

DWAYNE “CODGI”

CODRINGTON '04 grew up in Barbados, dreaming of becoming a software engineer.

His dream became a reality years later, after he made an audacious move to stand out among his peers at a Florida Tech career fair.

“Everyone else was walking up to the Microsoft booth with the same rehearsed lines, and I thought, ‘I need to stand out,’” Codrington says. “So, I walked right up and basically told them, ‘You’re going to hire me.’ It was bold, but that’s exactly why they remembered me.”

That confident approach earned him an interview for Microsoft’s prestigious technical scholarship—an opportunity for which he beat out 1,000 applicants and that, ultimately, paid for his final year at Florida Tech. Before he had graduated, he had secured a full-time role.

Codrington proceeded to spend a decade at Microsoft, leading teams across a range of products, including Office, SharePoint and the early foundations of what would become Office 365.

He then spent five years at SkyKick, a key GoDaddy partner, before accepting his current role as a senior software engineering manager on GoDaddy’s Identity Platform team.

Codrington and his team manage the systems that verify people’s identities when they log in to the platform and determine what information or tools they can access once they are signed in. Everyone at GoDaddy—employees and customers—uses these tools to keep accounts secure.

“A big part of my role is coordinating all the moving pieces—planning, setting strategy, keeping our services running securely and managing staffing needs,” Codrington explains. “It’s about developing future talent, supporting the great people we have and bringing teams together to stay ahead of challenges.”

Codrington has also made a significant impact through GoDaddy’s Black in Tech (GDBIT) engineering-focused summer intern outreach program.

In this role, he has helped create meaningful connections between interns and full-time engineers across the company, strengthening one of GoDaddy’s most important talent pipelines.

His leadership has brought exceptional new talent into GoDaddy’s engineering organization and expanded the GDBIT community.

“Once interns could meet us and see people who look like them thriving here, it showed them a real path forward,” he says. “Representation makes possibility feel real—and helps them believe they can do it, too.”

—Erin Alvarado '16

**SPOTLIGHT ON**

Dwayne “Codgi” Codrington

FLORIDA TECH CONNECTION: '04 B.S. mathematical sciences/computer science

FAVORITE HOBBY: Racing anything with four wheels or playing basketball

SUPERPOWER: Super strength

BEST ADVICE YOU’VE RECEIVED: “Be clear about what you’re working for. Whether it’s your family, your goals or something else, having clarity makes everything else easier.”

continued from page 35

chapter’s president, making the award even more meaningful.

7 JACQUELINE “JACKIE” GRIFFIN '12, '13 MBA, has been installed as the 2026 president of the Space Coast Association of Realtors, the largest professional membership organization in Brevard County. With more than 23 years in real estate, she has helped over 1,600 families buy and sell property across the Space Coast.

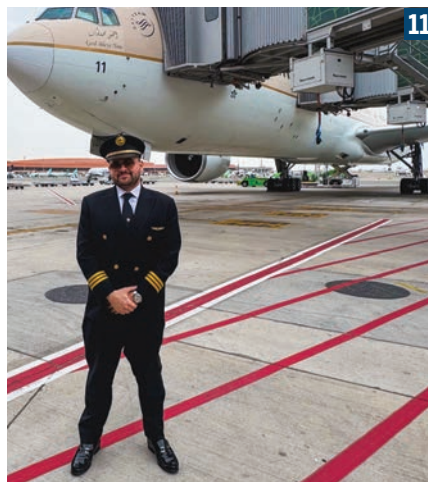
8 JOHN ROBERTSON '13, Ph.D., was named chief engineer for space solar arrays for Boeing Co.

9 WILLIAM WHITE '16 has built a successful career in commercial aviation. He spent four years with Envoy Air as a first officer, captain and line check airman before joining United Airlines in 2021 as a Boeing 737 first officer. In 2024, he upgraded to captain and now serves as a Chicago-based 737 captain. He also mentors aspiring pilots through the Aviate Pathway Program.

10 GIANCARLO SANTOS ARGUINZONI '17, '22 M.S., and his wife, Xiomara Ines—married Sept. 3, 2022—welcomed their two Panther cubs, Lenier Rafael and Maribel Ines, Dec. 11, 2025.

2020s

11 MAHMOUD ALMASRI '21, an aeronautical science with flight graduate from Saudi Arabia, now flies the Boeing 777 as an ultra-long haul first officer after several years on the Airbus A320. He credits his success to the skills he developed at Florida Tech, noting that flying in U.S. airspace still feels familiar and brings back great memories. His message to current flight students: “Training is demanding, but every moment in the cockpit proves that hard work pays off.”



12 NICOLETTE (MURPHEY) BACKERT '21 and **MATTHEW BACKERT '21** got married in March 2025 and recently welcomed their son, Colton, into the world. Nicolette and Matt met during their freshman year in Roberts Hall, and they are thrilled to be starting this new chapter together.

JARED MCCOLPIN '24, '25 M.S., has transitioned into a full-time role as an associate project controls estimator after a year of interning with Walt Disney Imagineering. McColpin is grateful to continue with the company and will now be supporting projects at Magic Kingdom in Orlando, Florida.



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IN MEMORIAM

ROBERT SARKISSIAN '78, a valued member of the College of Engineering and Science Advisory Board, passed away this year. A respected leader in his field, he served as the director of aerospace and defense at Cadence Design Systems and made his home in Atlanta.

LAWRENCE "LARRY" M. MOORE '86 passed away from cancer Jan. 16. Moore was a bright computer scientist, a kind roommate and a dear friend to many classmates. He was an active member of the Florida Tech Astronomy



Society during his studies and an actor in the student production of "Blythe Spirit" his senior year. He is survived by his two sisters and five children.

ANDREW "ANDY" BENTLEY '03 passed away in January 2025 after a mountain biking accident. Bentley's career spanned several organizations in the aviation industry, including The Weather Channel, GE, Boeing and, most recently, Butler America Aerospace LLC in Shelton, Connecticut. He is survived by his son, Owen, and his stepdaughter, Hailey.

RAVI AGARWAL, a brilliant and prolific mathematician, scholar and educator, passed away Dec. 3, 2025, at age 77. Agarwal brought his expertise and kindness to Florida Tech

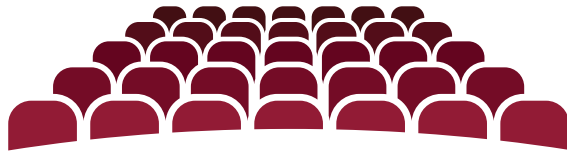
for more than a decade across two different tenures, including what would be his final position as research professor emeritus in the Department of Mathematics and Systems Engineering.

DANITA BERG, assistant professor of communications and humanities and chair of online liberal studies in the School of Arts and Communication, passed away April 23 at age 54. She started at Florida Tech in November 2019, and among her work outside the classroom, she was a founding member of the Creative Writing Studies Organization.

ARVIND MADHAV DHOPE passed away Nov. 10, 2025, at age 88. Dhople was a distinguished infectious

disease expert and professor emeritus whose research into leprosy brought him to Florida Tech for what would become a 27-year career.

JOSEPH RICHARD NEWMAN, professor emeritus, passed away peacefully at his Palm Bay home Feb. 18—his 84th birthday. Newman was a distinguished computer scientist and tireless administrator who helped shape the curriculum at Florida Tech's College of Engineering and ushered the university into the era of high-speed networks with its early participation in the Florida LambdaRail.



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Marie (McBride) Henderson

By Erin Alvarado '16

MARIE (MCBRIDE) HENDERSON '13 fell in love with the moon early in life—and has since transformed that passion into an extraordinary career.

Henderson is a planetary scientist at NASA's Goddard Space Flight Center, working in partnership with the University of Maryland, Baltimore County, since 2021.

A key contributor to NASA's return-to-the-moon efforts, she served as deputy lunar science lead for the Artemis II mission.

Looking ahead to future Artemis missions, she will take on the role of science officer, supporting astronauts from the Mission Control Center as a science flight controller.

But long before she worked alongside astronauts and mission control, Henderson was a high school student in a small Pennsylvania town—someone who dreamed of NASA but didn't yet know how to reach it.

Florida, she admits, "wasn't even on the radar."

That changed the day she stumbled across Florida Tech on an old college-match website.

"I was looking at space sciences and aerospace engineering, because I wasn't sure which path I wanted yet—and that's when Florida Tech popped up," Henderson says.

What caught her attention wasn't just the academic programs, but the university's origin story.

"The line that sold me was that Florida Tech was founded during the Apollo program so Kennedy Space Center employees could take night classes," Henderson says. "I wanted to

work for NASA, and here was a university literally built from the history of space exploration."

From that moment, the decision was easy.

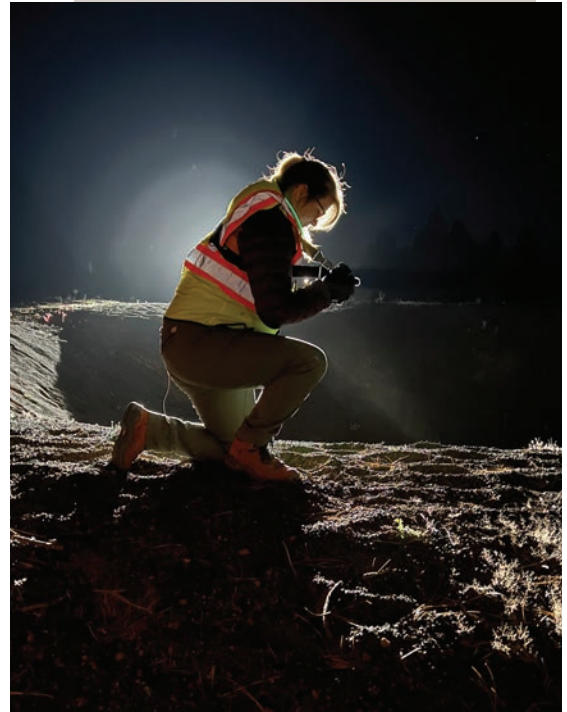
"It ended up being the only school I applied to," she says. "Once I learned about it, it was my first choice—the only place I wanted to go."

Today, that same passion for space exploration defines her work.

"My work ranges from training astronauts in lunar science and imaging to leading the Science Evaluation Room in Mission Control," she explains. "This modern version of Apollo's 'science backroom' played a critical role during the mission, and I guided the science team there through key moments, including the lunar flyby and downlinking the first images returned from the moon."

One of the Artemis II mission's challenges was that the science team didn't know the lunar illumination the astronauts would see until the spacecraft was en route to the moon. Because of that uncertainty, much of the science planning happened after the successful launch and translunar injection burn.

"Once we got the updated trajectory around the moon and could simulate the crew's view, the team quickly built the Lunar Targeting Plan, which described what features the astronauts should image and describe for lunar science," Henderson says. "Their observations helped us connect years of orbital data with what they were seeing in the moment."



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Henderson also collaborated closely with data systems specialists to map how information would travel from the spacecraft to the ground and, ultimately, into the hands of scientists for analysis.

"During the Artemis II mission, every bit of training, every simulation, every planning session and every data workflow we built mattered," Henderson says. "All of it came together so our team could make the absolute most of every moment the crew spent looking at the moon."

"It was an honor to be a member of the Lunar Science Team and to be a part of the success and 'moon joy' of the Artemis II mission."



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Greek Week

In March, Florida Tech's Greek Week raised a record-breaking \$22,382 for To Write Love on Her Arms, a nonprofit connecting people struggling with depression, addiction, self-injury and suicide to helpful, sometimes life-saving resources.

Eight fraternities, three sororities and two professional fraternities competed in varied events, including "Construction," a Greek Week staple during which participants build objects from canned goods they then donate to charity. This year, men's (pictured) and women's Alpha Eta Rho teams received the most votes, and the event donated about 5,000 cans to Second Harvest Food Bank of Central Florida.