

2024

THE MAGAZINE FOR FUTURE FLORIDA TECH STUDENTS

THE PURSUIT



RESEARCH ABROAD

Summer field research course immerses students in the sights, sounds and science of the Galápagos

CAMPUS FIELD GUIDE

CYBER CHAMPS

BTS: SCHOLAR-ATHLETICS



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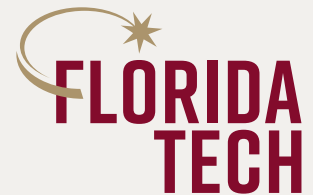
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floridatech.edu/visit

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Florida Institute of Technology does not discriminate on the basis of race, color, religion, sex, national origin, genetic information, sexual orientation, gender identity, disability, protected veteran status or any protected minority in the admission of students, administration of its educational policies, scholarship and loan programs, employment policies and athletic or other university-sponsored programs or activities. In accordance with Title IX of the Education Amendments of 1972, Florida Tech does not discriminate on the basis of sex.

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ON THE COVER:

Deztynee Bryan is a meteorology junior from the island of Anguilla. With career interests ranging from broadcast and forecasting to hurricane hunting, research and disaster management, Deztynee serves as Florida Tech American Meteorological Society treasurer and a Student Government Association senator.



HAMMOCK KITS

■ THE BIG PICTURE

HAMMOCK KITS

In need of some fresh air and relaxation? Swing by Evans Library to grab a hammock! Courtesy of Florida Tech's Student Government Association, the library now offers hammocks on loan. Available to check out for up to 72 hours, the hammock kit comes with instructions and has everything you need to set up

your relaxation cocoon. All that's left to do is choose two sturdy trees—which shouldn't be too hard to find in the neighboring Joy and Gordon Patterson Botanical Garden's 15 acres.

While you're hanging out, see how many species you can spot from our campus field guide (page 8)!

ABECEDARY OF FLORIDA TECH

A
*Ad Astra
Per
Scientiam*

Our beloved motto, which reminds us where we're going and how to get there.

Bisk College of Business
Offering all the elements of a top-notch business education—innovation, ethics, leadership, diversity—with a STEM-school twist.



Clemente Center
Home of Panther Athletics, as well as the varsity gym and a newly updated fitness center.



Denius Student Center
The center of Student Life and a place to grab a bite, get your books, attend a club meeting and visit Career Services.



Engineering
Our strong suit. Aerospace. Biomedical. Chemical. Mechanical. Civil. Electrical. Computer. Ocean. Software. Systems. Name an engineering program, and we've likely got a version of it.



f
Florida
The Sunshine State. What more needs to be said?



Greatness
What we—the Panther family—aspire to in everything we do. Good isn't good enough. Greatness is the goal!



H**ands-On**
A distinguishing quality of every degree offered on campus. Real, immersive, career-oriented experience with the tools and technologies used by professionals.

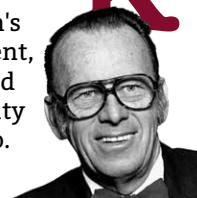
Innovation
Not to brag, but it's kind of what we're known for.



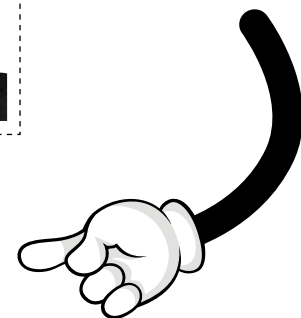
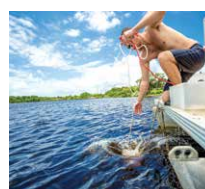
Jungle
Nickname for our beloved Patterson Botanical Garden.



Keuper
Rocket scientist. Visionary. Florida Tech's first president, who founded the university 65 years ago.

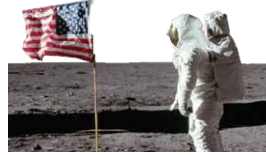


Lagoon
Located in our backyard, the Indian River Lagoon is the most biologically diverse estuary in North America. Ideal for research. Pretty nice for boating, fishing, kayaking and the likes, too.



Mathematics

Essential to natural science, engineering, medicine, the social sciences and more, at Florida Tech, math is so much more than numbers.



NASA

Without it, there may not have been a Florida Tech. The reverse is also true.

Pete

Our beloved mascot and campus' unofficial Chief Motivation Officer.



Olin Quad

Home to some of our most cutting-edge labs and equipment, the Olin Quad was recently completed with the addition of the brand-new, state-of-the-art Nelson Health Sciences building.



Quail

Raising these birds and selling their eggs out of a hatchery on campus was a literal "pet project" of founding president Jerome P. Keuper back in the early 1970s.



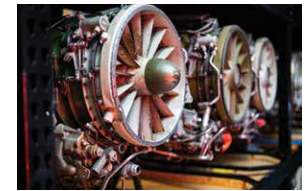
Research

For the benefit of all humankind—starting your very first year.



Science

One of our four biggest strengths that make us Florida's STEM University®.



Technology

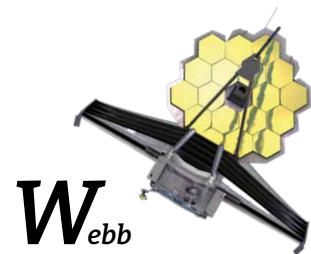
Infused into every one of our degree programs, from science and engineering to communication and business.



Umbrella
Bring one.

Vacation

The second-best reason to visit Melbourne. (Florida Tech is the first.)



Webb

Our new favorite space telescope (sorry, Hubble), which professors like Eric Perlman use for astronomy and astrophysics research.

Xcellent

How the Global Employability University Ranking and Survey describes the employability of our graduates—18th in the nation and 77th overall among 250 ranked universities, to be specific.



Yes!

What we say to students who want to do the impossible.



Zoo

A local attraction for people who love wild-life, Brevard Zoo also provides a place for Florida Tech animal psychologists to study the behavior of spider monkeys and other primates.



The College Tour ▶

Florida Tech Hits the Small Screen with Amazon

Florida Tech is thrilled to be the subject of another episode of “The College Tour,” an award-winning TV series on Amazon Prime Video. The university’s first episode was released on Amazon Prime Video in December 2020 and is available to watch on season 1, episode 2. In our new episode, 10 amazing students introduce you to what’s new—like our esports center and health sciences building—while reminding you of what stays the same: the university’s beautiful location, welcoming community, inspiring faculty, innovative culture and amazing, hands-on academic programs. Scan the QR code to watch the full episode or individual segments:



Inside the Episode

1 Going for Greatness



The episode kicks off with **Lauren-Ann Graham '20**, a young aerospace engineering alumna and current mechanical engineering graduate student who has already launched a career at NASA. In her segment, she discusses Florida Tech’s legacy of helping ambitious students, like her, gain the skills and knowledge needed to become extremely employable professionals.

experience he has gained during his time at Florida Tech and discusses what it means to be a student in the College of Aeronautics.

6 A Welcoming Community

From the day **Ceana Palacio** first stepped foot on campus to take her campus tour, she immediately found a sense of belonging. In her segment, she talks about the extreme sense of warmth you feel as a Florida Tech student—and no, she’s not talking about the weather. It’s about the people.

2 Engineering: Creating our Future

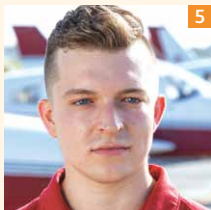


Founded as Brevard Engineering College in 1958, Florida Tech has engineering in its DNA. **Darin Hiraldo**, an ocean engineering senior also earning a minor in sustainability, talks about getting hands-on experiences at Florida Tech and preparing for Senior Design, Florida Tech’s signature capstone engineering experience.

7 Arts & Psychology: From Passion to Purpose

Josianne Keenan is taking her passion for the arts and turning it into a career. In her segment, the multiplatform journalism major shares how the College of Psychology and Liberal Arts provides various opportunities for students like her to pursue their interests.

3 Science: Redefining What’s Possible



Nashaita Patrawalla '19, '21 M.S., came to Florida Tech from the other side of the world to study astrobiology, and she stayed to get both her master’s and Ph.D. in biomedical engineering. If anybody knows about science and research at Florida Tech, it’s her! In her segment, she shares what it means to get involved in hands-on research at Florida Tech.

8 Scholar-Athlete Excellence

Carter Batt is an aerospace engineering sophomore and member of the men’s lacrosse team. In his segment, he shares what being a scholar-athlete is all about.

4 An Abundance of Involvement



You’ll never run out of clubs to join or things to do at Florida Tech. That’s why when **Marcello Mattei '22** came to Florida Tech from Venezuela, he quickly found a sense of community by getting involved on campus. In his segment, he shares how participating in Student Life activities can enrich your college experience.

9 Business: Striving for Success

Jared McColpin, a business administration junior enrolled in our FastTrack Master’s Degree program, has a strong vision for his future. In his segment, he shares how Florida Tech’s Bisk College of Business will help him get there.

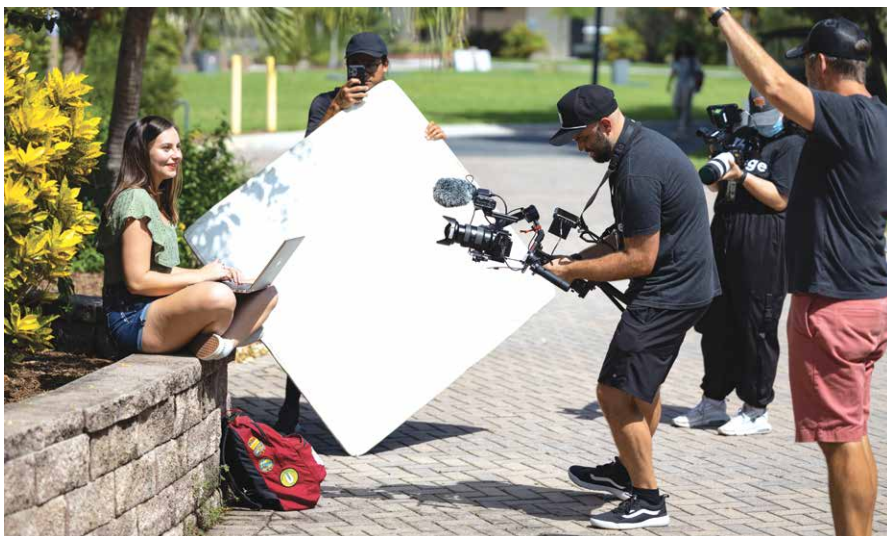
5 Aeronautics: Reaching New Heights



Ever since **Zach Miller** attended his first airshow when he was 4 years old, he has had his eyes on the sky! In his segment, the aviation management major shares the

10 Limitless Potential

Emma Conti is a senior double majoring in aerospace engineering and computer science with a minor in literature. She embodies the idea that whatever you want to do, you can make it happen at Florida Tech. In her segment, she shares how she has taken all her interests—computers, space, literature, music and theater—and turned them into an extraordinary educational experience.



BEHIND THE SCENES



A Brief Field Guide to Campus

BY MARY-LOU WATKINSON

ILLUSTRATIONS BY
YUMIKO KITAZONO

Florida Tech's campus is teeming with wildlife both big and small.

FROM THE COUNTLESS REPTILES AND INSECTS CRAWLING, WALKING AND SLITHERING ALONGSIDE YOU WHEN WALKING TO CLASS, TO THE BIRDS SOARING OVERHEAD, THERE IS ALWAYS SOMETHING NEW TO SEE.

One great place to view campus wildlife is the Joy and Gordon Patterson Botanical Garden. This public, 15-acre garden winds through the heart of Florida Tech and has become one of the most unique campus botanical gardens of its kind in the continental U.S. With palm trees and various tropical growth, visitors can observe a variety of creatures that call the habitat home.

Florida Tech is listed as a Green Campus by *The Princeton Review* because of its emphasis on sustainability. Part of that greenness is the quality of wildlife habitats on campus. With ponds, woodlands, wetlands and stream banks, it is an important haven for both resident and migrating species.

Since its inception, the university has had a joint mission to provide a great education, to be a hub of innovation and research and to provide beautiful grounds that are accessible to the local community. The geographic location was ideal not only for the rocket scientists who started the school, but also for biological diversity.

The campus woodlands, locally termed "hammocks" because of the dense tree coverings, are a form of wetland. The branches of the trees are laden with Spanish moss, other bromeliads, ferns and even orchids. In the garden, there is a blend of native and exotic tree species, including a collection of palms from around the world.

Butterfly gardens in the woodlands add to the color and biological activity, as the flowering plants attract a huge variety of insects, not just butterflies. In spring and autumn, migratory birds fill the trees as they pass through. The native wildlife also features a variety of birds, butterflies, dragonflies and insects that have yet to be cataloged.

The campus ponds and wetlands are not only full of life, but they also provide a natural classroom. As part of their studies, students use nets to sample the inhabitants and cameras to photograph specimens. Migratory ducks spend winter on the ponds, and one of the seven species of herons and egrets is usually visible.

HERE, WE'VE COMPILED A FLORIDA TECH FIELD GUIDE SHOWCASING JUST A FEW OF THE CREATURES ON CAMPUS.

THE INFORMATION IN THIS FIELD GUIDE WAS SOURCED FROM FLORIDA TECH CAMPUS WILDLIFE, A DIGITAL CATALOG PUT TOGETHER BY THE OCEAN ENGINEERING AND MARINE SCIENCES DEPARTMENT, WITH SPECIAL THANKS TO EMILY POLAK '23 M.S. AND ANDREW BOODOOSINGH '23. SCAN TO VIEW THE FULL CATALOG. ▶

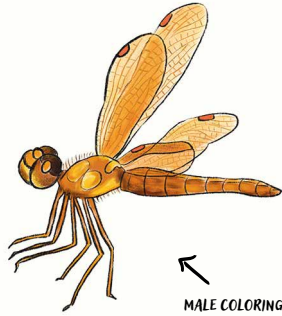


CREEKS/WETLANDS

LIFE ABOUNDS WITHIN OUR CAMPUS PONDS AND HERBACEOUS WETLANDS. THESE WORKING WETLANDS STORE WATER AND PREVENT FLOODING DURING TIMES OF HEAVY RAIN.

Eastern Amberwing Dragonfly

(*PERITHEMIS TENERATHE*)



← MALE COLORING

EASTERN AMBERWINGS ARE TINY, 21- TO 24-MILLIMETER DRAGONFLIES FOUND THROUGHOUT MOST OF THE EASTERN U.S. THEY HAVE A BROWN ABDOMEN WITH YELLOW RINGS. THE MALES DISPLAY BEAUTIFUL ORANGE OR AMBER WINGS WITH RED STIGMAS, AND THE FEMALES DISPLAY BROWN WINGS WITH RED STIGMAS. THEY CAN BE FOUND IN STILL BODIES OF WATER, SUCH AS LAKES AND PONDS.

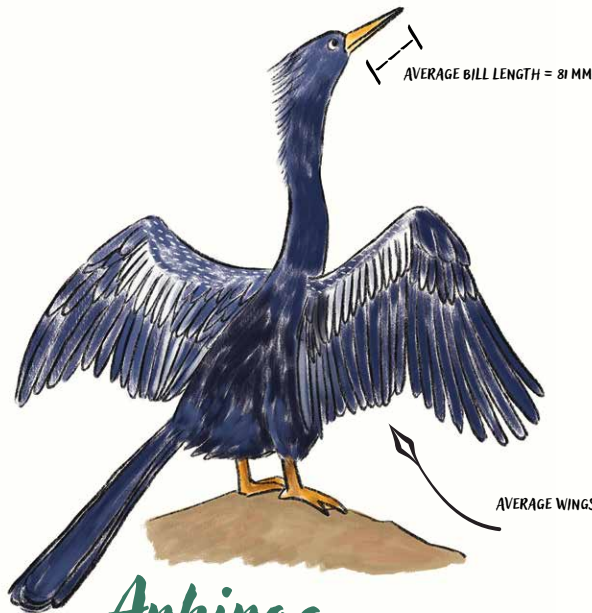


Cuban Tree Frog

(*OSTEOPIUS SEPTENTRIONALIS*)

THE LARGEST TREEFROGS IN NORTH AMERICA, CUBAN TREEFROGS ARE NATIVE TO CUBA, THE CAYMAN ISLANDS AND THE BAHAMAS. THEY WERE INTRODUCED TO SOUTHERN FLORIDA FROM THE CARIBBEAN AND HAVE CONTINUED TO SPREAD. INSATIABLE EATERS, THEY TARGET NATIVE FROGS, TOADS AND LIZARDS. THEY ARE CONSIDERED AN INVASIVE EXOTIC SPECIES AND A THREAT TO THE BIODIVERSITY OF FLORIDA'S ECOSYSTEMS AND WILDLIFE. RANGING FROM GREEN AND BROWN TO GRAY AND WHITISH WITH GOLDEN EYES, THEY CAN BE FOUND IN GARDENS, HARDWOOD HAMMOCKS, WETLANDS AND FORESTS.

↑ BAD NEWS FOR BIODIVERSITY



AVERAGE BILL LENGTH = 81 MM

AVERAGE WINGSPAN = 117 CM

Anhinga (*ANHINGA ANHINGA*)

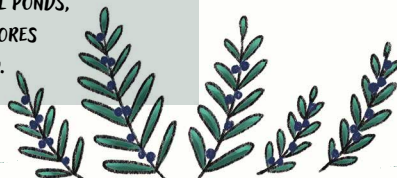
ANHINGAS ARE WATERBIRDS WITH AN OIL-SLICKED APPEARANCE AND SNAKELIKE HEAD. THEY GET THEIR NAME FROM THE TUPI INDIANS IN BRAZIL. THE MEANING OF THE NAME IS "DEVIL BIRD" OR "EVIL SPIRIT OF THE WOODS." HOWEVER, THEIR DISTINCTIVE SHAPE HAS EARNED THEM THE NICKNAMES "WATER TURKEY" FOR THEIR TAIL AND "SNAKE BIRD" FOR THEIR LONG, SNAKELIKE NECK. THESE BIRDS CAN BE FOUND IN LOCAL PONDS, SPEARING FISH OR SUNBATHING ON THE SHORES WITH THEIR SILVERY WINGS OUTSTRETCHED.



Red-Eared Slider

(*TRACHEMYS SCRIPTA ELEGANS*)

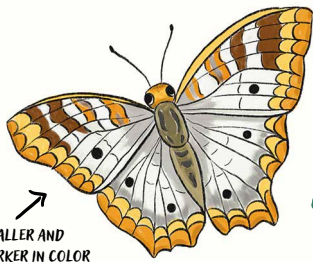
RED-EARED SLIDERS ARE MIDSIZED FRESHWATER TURTLES GENERALLY 5 TO 11 INCHES LONG. THEIR SHELLS ARE OLIVE GREEN WITH YELLOW ON THE BOTTOM AND DARK SPOTS IN THE CENTER OF EACH SHELL PLATE, AND THEY ARE TYPICALLY DISTINGUISHED BY THICK RED STRIPES BEHIND THEIR EYES. FOUND THROUGHOUT THE U.S., THEY ARE AMONG THE WORLD'S TOP 100 WORST INVASIVE SPECIES, ACCORDING TO THE GLOBAL INVASIVE SPECIES DATABASE. THEY CAN BE FOUND IN ALMOST ANY AQUATIC HABITAT WITH AN AMPLE SUPPLY OF VEGETATION.



Continued on page 10

WOODLANDS

OUR CAMPUS WOODLANDS ARE RICH IN LIVE OAKS AND NATIVE CABBAGE PALMS. THE COOL, VERDANT, SHADY PATHS THROUGH THE GARDENS ARE A FAVORITE WALK FOR MUCH OF THE CAMPUS COMMUNITY.



SMALLER AND DARKER IN COLOR DURING WET SUMMER MONTHS

White Peacock Butterfly

(ANARTIA JATROPHAE)

TYPICALLY SEEN FLYING LOW TO THE GROUND IN FLORIDA, WHITE PEACOCK BUTTERFLIES ARE 3 TO 6 CENTIMETERS LONG. WHITE WITH BROWN MARKINGS, THEY HAVE A SMALL BLACK SPOT IN THE CENTER OF EACH FOREWING AND HINDWING. THESE RESEMBLE A PEACOCK'S EYESPOT AND ARE THE REASON FOR THE BUTTERFLY'S NAME. THEIR LARVAE FEED ON FROGBIT, A MARSH PLANT, SO THEY ARE ESPECIALLY COMMON IN OPEN AND SUNNY HABITATS AT THE EDGE OF PONDS AND STREAMS.

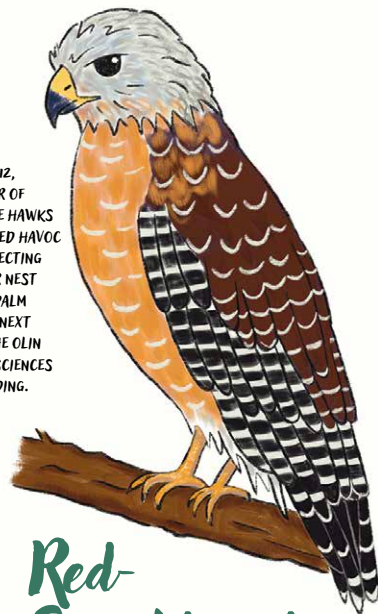


FIVE SLENDER TOES PROVIDE EXCELLENT DEXTERITY

Raccoon

(PROCYON LOTOR)

RACCOONS ARE LARGE MAMMALS FOUND THROUGHOUT THE U.S. IN A VARIETY OF ENVIRONMENTS, FROM WOODLANDS TO URBAN AREAS. ADULTS TYPICALLY WEIGH BETWEEN 10 AND 20 POUNDS. COVERED IN GRAYISH-BROWN FUR, THEY HAVE A DISTINCT FACE, WITH TWO BLACK MARKINGS AROUND AND BETWEEN THEIR EYES, SOMETIMES CALLED A "MASK." THEY ALSO HAVE A BUSHY TAIL COVERED WITH FOUR TO SIX BLACK RINGS. EXPERT TREE CLIMBERS, THESE OMNIVORES CAN BE IMPORTANT NEST PREDATORS.



IN 2012, A PAIR OF THESE HAWKS CAUSED HAVOC PROTECTING THEIR NEST IN A PALM TREE NEXT TO THE OLIN LIFE SCIENCES BUILDING.

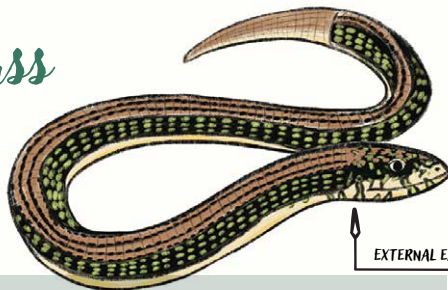
Red-Shouldered Hawk

(BUTEO LINEATUS)

RED-SHOULDERED HAWKS ARE THE MOST COMMON HAWKS ON FLORIDA TECH'S CAMPUS. FREQUENTLY PERCHED ON LIGHT POLES, THEY SCAN THE GROUND FOR LARGE INSECTS, LIZARDS AND SNAKES. THESE HAWKS ARE MARKED WITH A REDDISH-PEACH COLOR UNDERNEATH THEIR BODIES AND A STRONGLY BANDED TAIL. THEIR WINGTIPS ALSO FEATURE TRANSLUCENT CRESCENTS THAT APPEAR IN FLIGHT. LEARN THEIR DISTINCTIVE WHISTLE TO EASILY SPOT THEM AROUND CAMPUS.

Eastern Glass Lizard

(OPHISAURUS VENTRALIS)



EXTERNAL EAR OPENINGS

TYPICALLY BETWEEN 18 AND 43 INCHES, EASTERN GLASS LIZARDS ARE EASILY MISTAKEN FOR SNAKES DUE TO THEIR LONG, SLENDER, LEGLESS BODIES. HOWEVER, UNLIKE SNAKES, GLASS LIZARDS HAVE MOVEABLE EYELIDS AND EXTERNAL EAR OPENINGS. THEY ARE GENERALLY LIGHT BROWN, GREEN OR YELLOW AND HAVE DARK STRIPES ON THEIR BODIES. FOUND IN A VARIETY OF HABITATS, THEY MOST COMMONLY RESIDE IN FLATWOODS AND AROUND WETLANDS IN SANDY HABITATS.



SENIOR DESIGN



THE BIG PICTURE

SENIOR DESIGN

During their senior year, College of Engineering and Science students participate in a capstone student design project to gain hands-on experience applying the engineering and science knowledge and skills they've acquired throughout their college careers. Simulating a real-world work environment, these projects allow students to apply theory, think creatively and develop practical skills, such as teamwork, professionalism and leadership.

Their hard work culminates in the Northrop Grumman Engineering and Science Student Design Showcase, during

which student teams present their work and field questions from peers, faculty members, industry professionals and local leaders. Pictured here, students at the 2023 showcase present their project, the Man-Machine Interface, featuring chips that read and process analog muscle signals that applications, such as a robotic arm, can easily interpret.

Read more about the showcase and other recent projects.



PANTHERS ON THE RISE

Florida Tech breeds success. How do we know? Stories like these. Featuring young alumni, thinkers, doers and innovators, none is the same as another. But, they share a common theme:

THE RELENTLESS PURSUIT OF GREATNESS.

David Lennon '87 A.S., '89, Kevin Erickson '07 and Carly Randall '16 Ph.D.

all work together at the Australian Institute of Marine Science (AIMS) and are members of the Reef Restoration and Adaptation Program (RRAP). Each of them plays a different yet equally critical role in helping the Great Barrier Reef resist, adapt to and recover from climate change impacts. Lennon, project manager for reef monitoring and recovery projects, oversees several initiatives, including a coral reef condition indicator for managers; a new fish stock assessment of nursery habitats and nearshore and offshore reefs in the Great Barrier Reef; and EcoRRAP, which collects essential data to guide reef interventions.

"Growing up, I was obsessed with diving and being underwater. Even now, whenever I look at water, fresh or salt, I want to be under it. This inspired me to want to know how things work and fueled my desire to understand how marine ecosystems function."

Erickson, RRAP's industry development lead, spearheads the program's efforts to scale the research and development phase to the deployment phase—which will enable outputs to increase from hundreds of thousands to tens of millions of deployed corals over the

coming decade—by incorporating industry partnerships.

"I have been fortunate to work with several Florida Tech marine biology alumni since graduating. It is great to once again be working alongside fellow Panthers on such an important mission."

Randall, a senior research scientist, leads several AIMS projects focused on understanding the early life-history ecology of stony corals and the drivers of reef recovery following disturbances. She works to describe the complex and nonlinear relationships between the environment and recruit survival, and to apply this knowledge to improve reef restoration practices. She also works closely with Aboriginal communities to build capacity and empower Traditional Custodians to manage their sea countries.

"My Ph.D. research, which was funded by the National Science Foundation, allowed me to develop my lab, field and analytical skills in coral reef science that I apply to restoration science today. My time at Florida Tech was a wonderful period of scientific growth and exploration, and I'm so thankful for the opportunity and education I received."



Dina (Mekawi) DePina '03 is the senior vice president of creative studios and digital operations for Madison Square Garden Entertainment Corp. (MSG Entertainment) in New York City. She oversees a wide range of studio and digital operations across the MSG family of companies. Growing up in New York City, DePina longed to go to college somewhere sunny with a beach but that also had a great basketball program, leading her to Florida Tech, where she and the now Hall-of-Fame-inducted women's basketball team made school history in 2002 as the first team to advance to the Elite Eight. DePina's love for production started during her summer internship with the launch of *Teen Vogue* magazine. After graduation, she worked in the magazine and fashion industries for several years before achieving her goal of breaking into the sports industry through her role at MSG.

"One day, I could be working on a commercial for the Knicks, the next day, prepping for the Christmas season with the Radio City Rockettes, and then the day after that, helping create content for our newest venue, Sphere ... in Las Vegas. I'm constantly learning and switching gears to figure out how to move from one thing to the next. If there's something that you're really passionate about, just stick with it, keep applying, keep interviewing and keep meeting people. It's always important to not give up."





Gerardo Valerio '05, a Florida Tech men's soccer midfielder from 2002 to 2005, recently coached the Honduras Men's U20 National Team in the U20 World Cup in Argentina, competing against Gambia, Korea Republic and France in the group stage. Valerio, who began his coaching career with Palm Bay and Melbourne Beach youth programs while playing at Florida Tech, founded and became head coach of the Third-Division team Real Tegus in Honduras in 2016.

"My time at Florida Tech played a valuable role in my success as a coach and, more importantly, my ability to be an influential leader within my community. I not only teach the sport but introduce values like perseverance, sacrifice, respect, effort, creativity and many others to all my players. I credit this to my time at Tech."



Jody Cassell '07 is the director of conservation at Brevard Zoo, where she was first hired as a federal work-study student through Florida Tech. After she had completed all her work-study hours, she applied for a part-time position. Once she graduated, Cassell was hired full time and has been happily employed there for over 16 years. She oversees a team of 16 conservationists

who help improve critical habitats for animals within Florida and save species, such as the Florida grasshopper sparrow, from extinction through captive breeding and release. She also manages local rescue and rehabilitation efforts, as well as manatee releases; oversees grants for conservation research projects; restores living shorelines in the Indian River Lagoon; manages volunteers; and educates the public on sustainability efforts taking place at the zoo through programs such as Adopt-A-Mangrove.

"A huge reason why I love my job so much is because no two days are ever the same. I keep a bag in the car of 'dress' clothes, 'play' clothes and 'lagoon' clothes. So much of the work that I've been able to do thus far has been because of the connections that have been made around me. Some of them have been connections that people have made for me, and some of them are ones that I've done on my own. But it's a small world—get out there and meet people!"

Jeremy Caspersen '10 grew up with a race car driver as a mom. Because of this, he spent many years following the sport and attending events but never thought he'd work in the industry. In February 2021, he stumbled upon a job opportunity with NASCAR—a rarity, as the company had not hired an external candidate in over 18 years. With his background in construction engineering and inspection, plus his love of the sport, he was selected as the director of civil engineering. Caspersen's favorite part of his job has been organizing and managing pop-up events. For the past two years, he has also led the team that retrofits Los Angeles Memorial Coliseum for NASCAR's Cup Series Busch Light Clash.

"The Saturday of race weekend, when you're sitting in the stands, and the cars come out of the tunnel usually used by the football players, and they start running 75 to 80 miles an hour around the track that used to be an end zone—it's the most fulfilling feeling that I've had."



Kaleb Smith '11, '16 M.S., '20 Ph.D., can't get enough of computers or Florida Tech. After receiving his Ph.D. in 2020 with a focus on AI/deep learning, he led an AI prototype lab for a U.S. Department of Defense/intelligence community contractor at Cape Canaveral Space Force Base and continued using the AI/deep learning skills he learned from Florida Tech. He was recruited by NVIDIA in 2021 to become the site lead for the first NVIDIA AI Technology Center (NVAITC) in North America, stationed at the University of Florida. In his current role at the company, he runs the NVAITC and helps researchers in other universities and national research labs.

"This is my dream job, since I would continue to stay in school if I could, but now I get to do AI/deep learning research side by side with some of the best researchers in the country in their respective fields. Florida Tech was a great place to get an education and understand more industry work, since most of our grants were Department of Defense-focused. Since it is a smaller school, it really gave me a better one-on-one relationship with my advisor, who I could bother every day if I needed guidance or wanted to brainstorm."



Jazmin Truesdale '11 MBA works in the tech industry by day. But by night, she transforms into a superhero on the pages of Aza Comics. Growing up, Truesdale loved reading comic books and watching superhero movies, but she noticed one major flaw: a lack of women in leading hero roles. Truesdale started brainstorming her comic series, *The Keepers: Origins*. She created a digital video trailer

Continued on page 14

Continued from page 13

for the series: a space-fantasy adventure starring a team of diverse, female super-heroes. At first, she received negative feedback from agents, but the connections she made through the process led her to become a panelist at comic-cons throughout the U.S. Today, Truesdale is the founder of Aza Entertainment, a production company centered on telling the stories of women with diverse backgrounds.

"A lot of the characters are based on real people who inspired me growing up. My leading Black female character, whom I was told would be unmarketable, is my most popular character. It always starts with one. Just be resourceful, find a way and always keep trying."



Angie Lassman '12, '14 M.S., was honored with the first GOLD Ad Astra Alumni Award at the 2023 Florida Tech Alumni Awards Gala in March 2023. This new honor recognizes graduates of the last decade who represent the future leaders of tomorrow. In November 2022, Lassman accepted a meteorologist position with NBC News Climate Unit in New York City, appearing on the "Today" show weekend broadcast and weekday mornings on NBC, MSNBC and NBC News NOW. Lassman's climate coverage has earned her Emmy and Telly awards, as well as the Award for Excellence in Science Reporting by a Broadcast Meteorologist from the American Meteorological Society. When Lassman started her college search, she was drawn to Florida Tech's athletics program. Having grown up playing volleyball, she wanted to continue playing in college but also wanted to have the time to focus on her studies.

"There aren't that many schools that have really good athletic programs and really good meteorology programs, but Florida Tech checked both of those boxes. I am so passionate about the environment. I love talking about it and love meeting with different types of people to tell their stories."



Taylor Rains '17 always had a passion for aviation, exploring airport terminals for fun as a kid. Graduating with a bachelor's in aviation management, she interned with Southwest Airlines and worked at Allegiant Air. However, she realized she wanted something more hands-on that would allow her to return to exploring. Rains eventually found the perfect fit: aviation journalism. Now working as a full-time aviation reporter for *Insider Inc.*, she reviews flights, gets behind-the-scenes tours and shares her expertise on topics like the pilot shortage—her childhood dream come true.

"Florida Tech not only helped me learn the foundation of aviation theories and principles, but I was also given the opportunity to write. ... On the social side, Florida Tech was a place I finally fit in. In high school, I was a proud 'avgeek' who was obsessed with all things planes and space. But that meant I wasn't exactly on the top of the social ladder. However, everyone had their unique interest at Florida Tech, and I no longer felt like I was the odd one out."



Kevin Hudgins '19, '21 M.S., enjoys data science and aviation. While they may seem unrelated, he was able to pursue both fields during his time at Florida Tech—ultimately, landing him a job at JetBlue Airways. Hudgins works as an engineer for JetBlue's communication, navigation, surveillance and technical programs team. In his position as an engineer of aircraft data programs, he and his team are working toward innovating how they use aircraft sensor data. Engineering this data into a more usable medium allows analysts to find insights

FLORIDA TECH NOT ONLY HELPED ME LEARN THE FOUNDATION OF AVIATION THEORIES AND PRINCIPLES, BUT I WAS ALSO GIVEN THE OPPORTUNITY TO WRITE.

—Taylor Rains '17

that save the airline money and keep JetBlue's operation safe.

"I enjoy this career because it combines my knack for data science with my passion for aviation. Florida Tech gave me the flexibility to explore both. While learning the technical skills in my regular coursework, I was also able to explore my passion for aviation by flying with the Florida Tech Flight Team. Later, earning a master's in aviation safety while working as a JET intern supercharged my career with JetBlue."

Isiah Mossiah '20, '21 M.S., is a research associate at Hesperos Inc., an Orlando company that uses human-on-a-chip® technology to conduct disease modeling and drug testing. According to Hesperos, human-on-a-chip is an "interconnected, reconfigurable, multi-organ in vitro platform reproducing the functional aspects of human physiology, providing unprecedented visibility into how the human body will respond to chemicals and novel therapeutics." Mossiah always did well in science and math classes in high school, and he knew he wanted to do something related to medicine that wasn't the medical profession. Biomedicine/biotechnology was a perfect fit.

"The research that I did while at Florida Tech helped me as I went into my career, and it gave me a leg up on other people who didn't have research. I think having a biomed background, you can pivot into different realms. If you don't want to be a doctor or a physician's assistant or nurse, you can move into biotech or other things, because you take pretty much the same classes. I think it gives multiple opportunities."

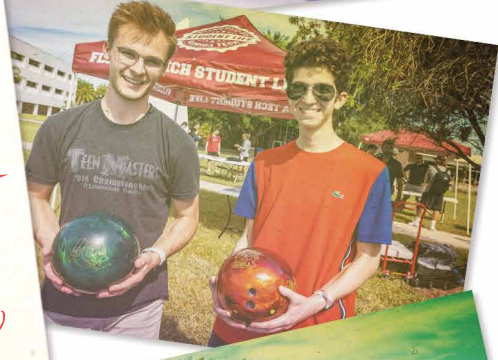


CLUBS & ORGS

With 150-plus student clubs and organizations ranging from the athletic and creative to the social and cultural, at Florida Tech, we've got you—and your social calendar—covered.

- 1. Active Minds *mental health help*
- + 2. African Student Association *tons of other international orgs, too!*
- 3. Anime Club
- + 4. Art Club *FUN!*
- 5. Astrobiological Research and Education Society *astronaut training!*
- + 6. Badminton Club
- + 7. Black Student Union
- 8. Campus Activities Board
- + 9. Caribbean Student Association
- 10. Chess Club
- + 11. College Players
- + 12. The Florida Tech Crimson *student newspaper*
- 13. Drone Club
- 14. Esports
- 15. Ethos Community Garden Club
- + 16. Fishing Club
- 17. FITlosophy
- + 18. FITV *annual film festival—must go!*
- 19. Flight Team
- 20. Rocketry Club
- + 21. Flux Ultimate Frisbee Club *women's competitions*
- + 22. Freediving Club
- + 23. Ice Hockey Team
- + 24. India Students Association, Sanskriti
- 25. It's On Us
- + 26. Kaleidoscope
- 27. Keuper Palm Botanical Society
- + 28. Korean Student Association
- + 29. Latin American Student Association
- + 30. Lost Musician's Society
- + 31. Panther Radio *pitch my podcast!*
- 32. Panther Robotics
- + 33. Panther Spirit Squad
- 34. Rainbow Alliance *allies for the lgbtq+ qsrmm community.*
- + 35. Rescue Squad
- + 36. Rock Climbing Club
- 37. Rocketry Club
- 38. Rotaract Club *service/volunteer org*
- + 39. Rowing Club, Women's Team
- + 40. Running Club
- + 41. Sailing Club
- + 42. Scuba Club
- + 43. Skate Club
- + 44. Soccer Club
- 45. Society for Science Fiction and Fantasy
- 46. Society of Women Engineers
- 47. Squamish *"jungle keepers"*
- 48. Student Astronomical Society
- 49. Student Organization for Sustainability Action
- + 50. Surf Club
- 51. Sustainability Outdoors Adventure Recreation Survival
- + 52. Swim Club
- + 53. Tennis Club
- + 54. Triathlon Club *get in shape!*
- + 55. Ultimate Frisbee Club

**athletic ~creative +cultural*



A PERFECT FIT

**INTRODUCING JOHN NICKLOW:
PROBLEM-SOLVER, PRESIDENT
AND IMPORTANT PIECE OF THE
FLORIDA TECH PUZZLE**

By Karly Horn



John Nicklow, Ph.D., is Florida Tech's sixth president.

But did you know that he also once wrestled a steer?

Yes, Nicklow has more than 25 years of higher education experience as a faculty member and administrator, most recently serving as president at the University of New Orleans (UNO).

But many years before that, he worked as a pizza delivery driver, a lumber yard laborer, a bartender and a bouncer.

He is a former NCAA Division I football player (right offensive tackle) who earned his bachelor's and master's degrees in civil engineering at Bucknell University, later earning his Ph.D. in civil engineering from Arizona State University.

But he's also a romantic (just ask his wife, Stacy Nicklow, Ph.D.) who loves spy novels and considers Jack Ryan a personal hero.

These many facets both past and present, conventional and unexpected, are the puzzle pieces that intricately connect to form John Nicklow, our new president.

It's a fitting metaphor for Nicklow, an avid "puzzler."

"I always have a puzzle going. It's almost like meditation for me," Nicklow says.

To some, assembling a puzzle from 1,000 tiny pieces might sound overwhelming.

But to Nicklow, ever the problem-solver, every piece flipped is an opportunity. Every match made is progress. And when the puzzle is complete, it's a success.

I HAVE A NEED TO CREATE, I HAVE A NEED TO PROGRESS, I HAVE A NEED TO PROBLEM SOLVE.

—John Nicklow, Ph.D.

Problem solved, next puzzle, please.

"I have a need to create, I have a need to progress, I have a need to problem solve," Nicklow says. "Maybe it's the engineer in me that always needs a project—to make things, whatever they are, somehow better."

Nicklow's positive, level-headed persistence translates from puzzles and problems to people, his profession and pretty much everything else, which so far, has served him well.

It led him to Bucknell, a university that encouraged him to pursue the engineering degree he desired while also playing football, an almost unheard-of combination.

After two years, he entered a five-year program that enabled him to simultaneously earn his bachelor's and master's degrees. During that time, he completed two summer internships, one of which was on Navajo tribal lands in the New Mexico desert, where he learned as much designing water distribution systems for communities with none as he did interacting with the different people and cultures that surrounded him.

"Working with Native American communities really taught me the value of communication and understanding a culture without making assumptions," he says.

The program also afforded Nicklow the opportunity to work as an undergraduate research assistant. The stimulation and fulfillment of the experience inspired him to transition from industry to academia.

"It's going to sound odd, but I got bored, and I wanted more," he says. "I really missed teaching, and I really missed research. So, I went back and got my Ph.D. and then, ultimately, my first tenure-track job in education."

Nicklow went on to hold increasingly senior titles, including chief enrollment officer and, later, provost and vice chancellor for academic affairs at Southern Illinois University, followed by provost and, eventually, president at UNO.

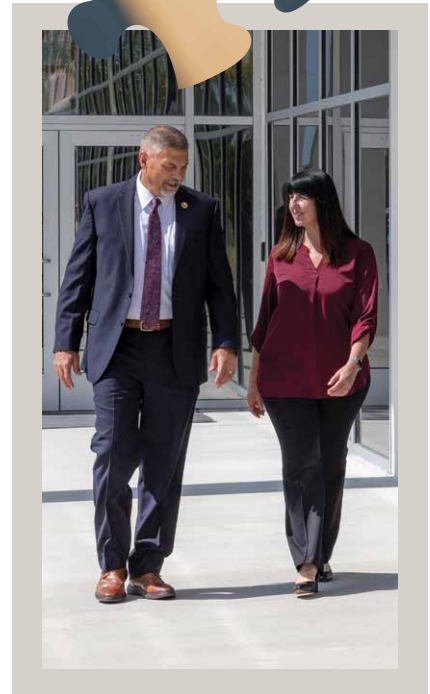
He has become widely recognized at the university level, nationally by the American Society of Civil Engineers (ASCE) and by industry for his teaching and research accomplishments.

When it comes to his career, Nicklow can speak passionately about his research, focused on STEM education advancement and environmental and water resources systems optimization.

He can tell you about the four books he has authored, and he is happy to discuss his experiences becoming and serving as a registered professional engineer, a certified professional hydrologist, an ASCE fellow and an American Academy of Water Resources diplomate.

But if you really want to learn about his professional passion, ask him about Dave.

A first-generation college student Nicklow met through the rolling mentorship program he'd established, Dave was so grateful for Nicklow's guidance and coaching to and through medical school



that he once drove four hours with his dad, his chainsaw, two generators and a backhoe to help Nicklow clean up the wreckage the May 2009 Southern Midwest Derecho had left behind just days before SIU's commencement ceremonies. Today, Dave is a successful, accomplished surgeon and still one of the most generous people Nicklow knows.

Ask him about Janie.

Janie needed a job to help put herself through college. So, the Nicklows hired her to babysit their son, Ethan, teach him to swim and watch their house and dog, Bayley, when they were out of town. She's now the owner and operator of AWR Engineering Inc., a prominent water resources engineering firm in Anchorage, Alaska.

Ask him about Christine, or Nigel, or Kennedy or Kyle ...

These, Nicklow says, are the highlights of his career.

"I have the best job in the world. Yes, there are a lot of responsibilities and challenges, but in education, we get to serve students and make an impact in a really positive way," he says. "We get to make such a difference in people's lives, whether it's through innovative research or graduating students and putting them on the path toward meaningful careers."



NOT YOUR GRANDMOTHER'S LIBRARY

There is one place on virtually every college campus where students turn when they need a little help studying, creating a new project or decompressing: the library. At Florida Tech, John H. Evans Library serves as a pillar for learning, innovation and digital scholarship, and the library staff members are committed to developing forward-thinking services, programs, spaces, strategies and systems that promote discovery, dialogue, learning and nourishment of the human spirit.

But it's just a library, right? Not at Florida Tech. Let's count down and take a deeper look at what makes Evans Library unique.

5 NONTRADITIONAL CHECKOUTS

1. HAMMOCKS

Prefer to take your study session (or nap break) outdoors? Check out one of Evans Library's hammocks, courtesy of the Student Government Association. For more information, see page 3.

2. OCULUS VIRTUAL REALITY HEADSETS

Virtual reality (VR) headsets and development stations are available in the library's Digital Scholarship Lab for students to view in-progress projects. Also available are Windows PCs with programs commonly used for VR/metaverse creation.

3. GOPROS/360 CAMERAS

Capture any moment by checking out a GoPro or 360 camera. Don't forget to also borrow a hand-steadying gimbal to keep your videos shake-free.

4. CALCULATORS

Ever needed a high-tech calculator for class but didn't want to spend the money on one? The library has you covered. In fact, you can check out many useful everyday items, such as USB chargers, adapters and dongles.

5. ART SUPPLIES

Fulfill your dreams of being the next Picasso by checking out some of the library's various art supplies, which include brush markers and Prismacolor colored pencils.

4 UNIQUE SPACES

1. TRANSFORMABLE SPACE

The second floor of the library acts as a transformable space for pop-up presentations, group projects and collaborative work. All modular furniture on this floor can be moved to fit any setup, and various mounted Clear Touch boards maximize creative teamwork.

2. RESTING STATIONS

The fourth floor, also known as the silent floor, is where weary students can take a break. Offering antigravity chairs, hammocks, pillows and blankets, it is a perfect spot to relax.

3. RUTH FUNK READING ROOM

Also on the fourth floor, this cozy space houses the textile and art books that supported the former Ruth Funk Center for Textile Arts on campus. All decorations were created in the CraftLab.

4. UNIVERSITY ARCHIVES ROOM

Visit the Archives Room on the first floor to look back on the university's history since its inception in 1958—particularly relevant this year, as we celebrate Florida Tech's 65th anniversary.



3 WAYS TO GET CREATIVE

1. DIGITAL SCHOLARSHIP LAB

The DSL supports research, teaching and learning across all disciplines using digital tools and resources. Some of the DSL's offerings include a podcast and video studio, a video display wall, 3D printing, geographic information systems (GIS) and VR creation.

2. CRAFTLAB

Located on the first floor, the CraftLab is a place for students, faculty and staff to make unique creations for free. A vinyl cutter and sublimation printers can be used to create unique T-shirts, mugs, stickers, keychains and more.

3. PLAY THE PIANO

Also on the first floor is the library's piano. All are welcome to play a tune, often ending in student ovations.

2 BOOKS—YES, THE LIBRARY STILL HAS BOOKS!

1. 1730s BIBLE

Check out the library's oldest book, a Bible from the 1730s. The only catch? It's written in German.

2. FLORIDA TECH YEARBOOKS (1968–2001)

Check out a yearbook to discover the history of Florida Tech's student organizations and delight in '70s fashions and '80s hairstyles.

EVANS LIBRARY

With resources to aid in all aspects of a student's life, there is truly only one Evans Library. Schedule a visit to see it, along with many other awesome buildings on Florida Tech's campus, for yourself.

FAR AWAY, WHERE THE LEARNING IS EVERYWHERE

SUMMER FIELD RESEARCH COURSE IMMERSSES STUDENTS IN
THE SIGHTS, SOUNDS AND SCIENCE OF THE GALÁPAGOS

By Adam Lowenstein | Photos by Richard Aronson

EVERYWHERE YOU
LOOK IS SCIENCE;
EVERYTHING YOU
SEE IS A LESSON
COME TO LIFE.

—Richard Aronson, professor
and department head in ocean
engineering and marine sciences

◀ On the beaches of the Galápagos, visitors can see hundreds of sea lions snoozing in the sun. Underwater, they are curious and playful, swimming circles around snorkelers but staying just out of reach. This young sea lion was photographed at Isabela Island.

▶ The Galápagos penguin, like this one from Isabela Island, is endemic and the only equatorial penguin species. Penguins are normally found in southern South America and Antarctica, but Galápagos penguins live side by side with pelicans, boobies and other tropical seabirds.



without some form of visualization, and what's better visualization than being in the ecosystem itself? It really helps complete the whole learning experience."

Richard Aronson, a marine biologist, professor and department head in ocean engineering and marine sciences, led the 2023 Galápagos expedition. Working with his colleague and friend professor Mark Bush, Aronson has taught or co-taught nearly a dozen trips to both the Galápagos and the Amazon, courses that Bush launched in the early aughts. (Bush was unable to attend this trip due to an ankle injury from an earlier field expedition.)

Involving 20 students and days of travel by car, plane, boat and foot, the trips currently cost about \$4,700 per student for everything, including all travel expenses and three college credits for the class. Accommodations in the Galápagos are generally modest hotels, and internet service is spotty. No one complains.

"I signed up for this trip because it was a once-in-a-lifetime opportunity to travel to the Galápagos Islands, a place you've been learning about since elementary school," Zerona says. "The price is well worth the credits, and it's a jam-packed trip that you didn't have to do any of the planning for, with meals included."

Aronson remembers that his own family used its modest surplus income to travel, teaching him its value and the power of firsthand experiences.

"When you travel, you learn," he says. You learn, but you learn amid what he called "intangibles and collaterals" encountered only on these journeys: the scents and sounds, the emotions.

"You see something that you've never seen before. Not only have you not seen it before, but it's incredibly dramatic, and you think, 'Oh my God, I'm looking at a waved albatross sitting on its egg. I never thought I'd see that,'"

Aronson says. "It does something to your mind, and in a good way."

The sensation of seeing a unique animal in real life plays out many times on the field research trips, given the diversity of the Galápagos Islands. Giant tortoises, lava lizards, swallow-tailed gulls, Darwin's finches, Galápagos penguins, blue-footed boobies, pintail ducks—those are just some of the terrestrial critters. Other animals, such as sharks and sea turtles, as well as sea lions and large, colorful fish, are on view for snorkelers and divers. Upwelling of nutrient-rich waters feeds the plankton that support all the fabulous sea creatures, as well as the large population of seabirds.

"There were absolutely stunning views both under and above the water, as well as some of the most beautiful animals I've ever seen," Ahrens says. "The amazing thing, as well, is that all of those animals were truly wild. Seeing that much biodiversity in such a relatively undisturbed habitat was an incredible experience. My expectations were high, and they might've even been exceeded."

As part of the class, students conduct surveys of marine life to test hypotheses, such as whether having larger populations of sea urchins and parrotfish means there is less seaweed around.

"Simple stuff, but important," Aronson says.

They then write papers about their analyses.

Students also must keep a journal, essentially a naturalist's log. It features thoughts about what they are seeing but also about their feelings and experiences.

They also must be prepared for some serious walking. Among the most challenging is a rough, 10-mile hike along the rim of the Sierra Negra volcano on Isabela Island. The first part is straight uphill, Aronson says—"a total kick in the shorts." After they view the volcano's caldera, a large volcanic crater, the walk takes the group through the rough terrain of a scenic lava field called Volcan Chico, a "parasitic cone" on the flank of the Sierra Negra.

"This is not a vacation," Aronson says. "We push hard, both physically and mentally."

He adds, "Everywhere you look is science; everything you see is a lesson come to life. In the rain, drifting with the ocean currents, on 10-mile hikes—and no one would change a thing."

It wasn't the usual classroom or the usual classmates.

Madison Zerona, a marine biology senior at Florida Tech, was snorkeling at Kicker Rock off San Cristóbal Island in the Galápagos archipelago in summer 2023, joined by scalloped hammerhead sharks, Galápagos sharks and large sea turtles.

"It still gives me shivers," she says, weeks after the thrilling experience. "It's amazing how animals in the Galápagos do not see humans as threats and are all very calm around us."

It is pretty amazing, as well, to see lessons studied on Florida Tech's Melbourne campus brought to life in one of the most significant scientific environments in the world.

"Traveling with a group of enthusiastic scientists and two experienced guides through what feels like another planet, you really get to learn a lot in such a short time span," Zerona says. "I was able to take what I learned in the classroom and apply it in the field by collecting data and learning how to analyze it quickly. The information really clicks in your head when you are able to witness it in real life."

The class is Field Biology and Evolution of the Galápagos Islands, one of several summer field research courses offered at Florida Tech.

"I think this type of experiential learning is very beneficial. It gets people out of the classroom and actually experiencing the world and the environment," says fellow traveler and marine biology student Joshua Ahrens. "Biology field courses especially work well because it's hard to learn about the ecology side of biology

CULTIVATING THE NEXT GENERATION OF INDUSTRY LEADERS THROUGH INTERNSHIPS

At Florida Tech, the pursuit of greatness extends well beyond the confines of lecture halls and textbooks. We understand that the bridge between classroom knowledge and real-world success is often built through hands-on experience.

Florida Tech makes it a priority to meet the needs of students and employers by offering unique degree programs, hands-on experiential learning opportunities and important

resources that help students secure internships and get a head start on their dream jobs.

Learn about some of our dynamic students, a diverse group representing a multitude of disciplines, all sharing a common thread: They have secured coveted internships that not only open doors to invaluable professional experience but also serve as steppingstones to promising careers.



MEET LILLIANNA VITALE

INTERNSHIP HOST: CIRCLES OF CARE
MAJOR: FORENSIC PSYCHOLOGY

"I got hands-on experience of what it is like to work with individuals facing felony charges but were incompetent to stand trial due to a mental illness. I visited some clients in jail and screened potential new clients for the program. I received this internship through a class I took in the spring, which works with Career Services

to match you with an internship. The knowledge I had learned in classes about competency, the legal system and mental disorders helped me further showcase my intelligence in this field and gain respect. After graduation, I am pursuing a job offer at Circles of Care to be a case manager."



MEET DOMINIQUE OWENS

INTERNSHIP HOST: NASA - KENNEDY SPACE CENTER (KSC)
MAJOR: MASTER OF BUSINESS ADMINISTRATION

"As a budget analyst, I am responsible for financial reporting, presenting budget status to CFO management, developing dashboards and overseeing financial and reporting tools. Before starting my internship, I worked in the Florida Tech Career Services office. The staff there is amazing; they helped and encouraged me

through the entire process of applying and interviewing for internships and jobs. I genuinely believe that without their guidance, I would not be where I am today. In addition, the Data Analytics and Visualizations class helped me stand out from the hundreds of other applicants. Florida Tech's programs allow students to learn and grow in the STEM and business fields."



MEET COLBY SCOTT

INTERNSHIP HOST:
NAVAL SURFACE WARFARE CENTER
MAJOR: OCEAN ENGINEERING

"I worked in the Center for Innovation in Ship Design, where teams of interns design future ship concepts based on pre-prepared concept descriptions. My team's project is to design a replacement for a class of Coast Guard boats and then make a Navy 'variant' of the design. I

found out about this internship through the Society of Ocean Engineers club on campus. Florida Tech's ocean engineering program, in particular, is really good at preparing students for career success, with courses in various subdisciplines and professors who are visibly excited to teach the next generation of ocean engineers. Florida Tech may be a smaller school, but its recognition reaches far."



MEET AVA CROCKER

INTERNSHIP HOST: L3HARRIS TECHNOLOGIES INC.
MAJOR: SOFTWARE ENGINEERING

"I'm a member of the Society of Women Engineers on campus, and we attended the Women in Engineering conference in Houston, Texas. There, I spoke with L3Harris, who offered me an internship on the spot! My goal is to one day help send people back to the moon and onto Mars with software I've worked on. My

time at Florida Tech has helped prepare me for this goal because of how guided our programs are to the space industry. Professors are always there to help you, and between networking events on campus, Career Services and clubs, there are so many ways to kick-start your career at Florida Tech."



MEET LEXI LINDER

INTERNSHIP HOST: LOCKHEED MARTIN SPACE
MAJOR: MECHANICAL ENGINEERING

"One of my responsibilities was to provide an engineering perspective to enhance the tool being developed. What I have accomplished outside the classroom would not have been possible if it weren't for my professors' support. Upon graduation, I intend to work in a systems engineering role within the space industry,

and Florida Tech has provided the foundational knowledge, which has helped me during interviews and throughout my internships. I was able to network myself internally to land this role. I recommend getting involved in projects and research, which increase your skill set. Network as much as possible, and always take time to learn about others' experiences within your discipline."



MEET CRAIG BOSWORTH JR.

INTERNSHIP HOST: SPACEX
MAJOR: AEROSPACE ENGINEERING

"I worked on upgrading hydraulic systems on the 'Of Course I Still Love You' dronship. I also finalized the design of an improved gangway for accessing the dronship that will make it safer to get on board and reduce gangway movements. I intend to go into the spaceflight industry after I graduate, and I have varied interests,

so I'd be happy anywhere in the industry, from propulsion testing to mission design. The aerospace engineering program and projects I've worked on at Florida Tech have been instrumental in building the base level of experience that helps you stand out on internship and full-time job applications."



MEET ALYSSA CAMPOS

INTERNSHIP HOST: ANDERSON CONNECTIVITY
MAJOR: ELECTRICAL ENGINEERING

"I learned PCB design utilizing Altium Designer and created functional boards; I also aided in EMI prequalification testing for their KPSUs that would be sent off to customers. Florida Tech's Career Services office helped me tremendously during the résumé-building process, a crucial part in preparing for the spring career fair, which

is where I met Anderson Connectivity. After graduation, I plan on pursuing an electronics-based career, and my previous classes helped solidify my decision in what I want to focus on in a career. The classes have made my internship experience a smooth transition. Florida Tech provides all students a recipe for success."

A Byte of FITSEC

8 (TID)BITS ABOUT FLORIDA TECH'S CHAMPION CYBERSECURITY COMPETITION TEAM

A BYTE IS A UNIT OF DIGITAL INFORMATION THAT MOST COMMONLY CONSISTS OF EIGHT BITS. HERE ARE EIGHT (TID)BITS YOU MAY NOT KNOW ABOUT FITSEC.

1. FITSEC is Florida Tech's cybersecurity competition team.

It was founded in 2019 and has since seen a rapid rise to the top of the collegiate competitive cybersecurity realm.

When FITSEC started, it was a fairly disjointed group of about 10 computer science and engineering students who wanted to see how well they could do in a cybersecurity competition (spoiler: not

well). But roughly five years, two National Cyber League (NCL) championship victories and countless hours—recruit, practice, compete, win, repeat—later, the team is up to about 80 active members,

40 of which are registered with the NCL and six of which placed in the top 100 of 7,926 students competing in the fall 2023 Individual NCL Championship, and it shows no signs of slowing down.

2. "FITSEC" stands for "FITSEC InFormation Technology Security."

It is a recursive acronym, meaning that the first letter stands for the acronym itself—a common phenomenon in computer programming. Other examples: GNU: GNU's Not Unix; WINE: WINE Is Not an Emulator; RPM: RPM Package Manager.

3. FITSEC goes hand in hand with our cyber operations degree concentration.

Launched the same year as FITSEC, the cyber operations concentration for undergraduate computer science students is composed of six hands-on courses that are very focused on workforce skills that also complement the competition aspect. Students describe it with one word: hands-on.

The day after Russia cyberattacked 500 top U.S. companies, O'Connor (see No. 5) and his students analyzed and deobfuscated the malware live in class.

The midterm for another class has each student use code to write a program, swap for another student's and break it.

Another must build the challenges for the university's Space Heroes international capture the flag competition (see No. 7).

"I think we take for granted how unbelievably amazing the cyber concentration is here. The material that's taught is very, very unique. The faculty involved, I think they do an incredible job conveying it. I think that plays a massive role in FITSEC's competitiveness—just the quality of cyber education that we get here."

—Robert Heine '23, B.S. computer science, former FITSEC member

4. They win. A lot.

Some of FITSEC's biggest victories to date:

- No. 1 NCL championship, Fall 2022
- No. 2 U.S. Cyber Challenge Cyber Bowl, 2022
- No. 1 Saint Leo University's Cybersecurity Capture the Flag Invitational, 2023
- No. 2 JumpWire CTF at ShmooCon, 2023
- No. 5, CyberSEED, 2023

5. They're coached by the best.

- **TJ O'Connor**, primary FITSEC faculty advisor and director of Florida Tech's cybersecurity program, served as head coach of the first-ever U.S. Cyber Team that placed third in the International Cybersecurity Challenge in Athens, Greece, in June 2022.



- **Sneha Sudhakaran**, a computer engineering and sciences assistant professor and mobile forensics expert, joined the team as FITSEC co-advisor in August 2022.



I'VE GOT COMPANIES REALLY EXCITED ABOUT THE STUDENTS WE'RE PRODUCING AND ASKING FOR THEM BY NAME.

—TJ O'Connor, primary FITSEC faculty advisor and director of Florida Tech's cybersecurity program



Pictured here: Curtice Gough, FITSEC team member and former president

6. The wins continue post-graduation.

Countless FITSEC alumni—many of whom received job offers before they even graduated based on their competition performances—work in cybersecurity roles at major organizations across the country, including:

- Boeing Co.
- Cromulence
- U.S. Central Intelligence Agency
- ICR Inc.
- International Systems Management Corp.
- Pidoxa
- Raytheon CODEX
- REDLattice
- Research Innovations Inc.
- STR Global
- Mayo Clinic

"Competitions are great, but they're short-lived. Our students are graduating and going into industry and doing great things. I've got companies really excited about the students we're producing and asking for them by name. That's because of FITSEC."

—O'Connor

7. FITSEC hosts competitions, too.

FITSEC hosts its annual Space Heroes Cybersecurity Competition in spring. Students develop, organize and carry out the two-day, international capture the flag (CTF) competition that draws over 2,000 competitors from around the world. Its name and space-themed challenges pay homage to Florida Tech's space heritage,

and the prize for winning teams have included certificates from astronauts Winston Scott and Drew Morgan. In 2023, FITSEC hosted its first Cyber Heroines CTF, which honored and highlighted women's unique accomplishments in cybersecurity and had 670 registered users.



8. But it's not all about competition.

Outside of "hacking," FITSEC is actively seeking opportunities for members to get involved in the university and greater community through things like beach cleanups, interclub partnerships, developing the Florida Tech chapter of Women in Cybersecurity and more.

"FITSEC feels more like a fun little community than it does a strict club or a competitive team. We're always training. We're always practicing. But it's just friends hanging out, having a time, learning about cyber stuff."

—Heine





1. MARKET DAYS

Monthly during the school year, local vendors and food trucks from across the county venture onto campus to offer their local food products, produce, crafts, plants and so much more.

2. HOMECOMING FEST

The Florida Tech Alumni Association orchestrated an unforgettable evening at the 2023 Homecoming Fest. Held beachside at Nance Park in Indialantic, the event showcased headliner Saint Motel, with performances from bands Blackstarkids and Artikal Sound System. Homecoming Fest also featured street vendors, food trucks and family-centric activities. Combined with

the array of additional homecoming week events, including a 5K, casino night and carnival, this marked the largest homecoming in university history.

3. BLACK IN STEM CELEBRATION

In March 2023, the second annual student-hosted Black in STEM Celebration event celebrated African Americans in STEM disciplines. Featuring a panel discussion with distinguished Black scientists and professionals, the event also included Black-owned food trucks, live music and a community market.

“We’d like to inspire African American students, to show them

that there’s more that they can do than just be a performer or an entertainer or an athlete, anything like that—show them that there’s a lot more opportunities in the world,” said Iryan Ogbezuwa, an electrical engineering student and president of the Black Student Union.

4. SUN N’ FUN

We had a blast at the SUN n’ FUN Aerospace Expo in April 2023. Not only did we get to show the community what Florida Tech is all about at one of the world’s largest annual aviation events, but we also hosted about 30 Panthers at a special alumni gathering!

5. SPACE WEEK: ASTRONAUT TALK WITH COL. MIKE FOSSUM

In April 2023, retired astronaut Col. Mike Fossum, who flew on missions STS-121 and STS-124 and served as a mission specialist on Expedition 28 and Expedition 29 on the ISS, addressed Florida Tech students and faculty during Space Week—a student-run week of events celebrating the exploration of Space. Fossum shared his life story and experiences as an astronaut, emphasizing resilience and determination in achieving his astronautical career.



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6. ROTC COMMISSIONING

At Florida Tech, the ROTC program is a dynamic journey of leadership development and military education. ROTC cadets undergo rigorous training, fostering discipline, teamwork and leadership skills essential for future military service, while also earning a degree and gaining practical experience in their major field. The program culminates in a commissioning ceremony, marking the transition from cadets to second lieutenants in the U.S. military. These ceremonies are a testament to the commitment, sacrifice and growth

these individuals have experienced throughout their ROTC journey at Florida Tech.

7. FIT AVIATION SUMMER SOCIAL

In June 2023, FIT Aviation hosted its 2023 summer social, featuring multiple campus organizations, aircraft displays and discovery flights. Students also chatted with representatives from Endeavor Air. Attendees explored and met the pilot of a historical P-40 aircraft—of which there are believed to be no more than 35 airworthy in existence—that did multiple fly-bys during the event.

8. NATIONAL GEOGRAPHIC'S SHARKFEST

Toby Daly-Engel, a distinguished shark biologist and director of Florida Tech's Shark Conservation Lab, was a featured expert on "When Sharks Attack... and Why," an eight-episode series that debuted on National Geographic in July 2023. Filmed in part in her lab at Florida Tech, Daly-Engel dove into the science behind shark-human interactions and busted some myths that make people afraid of the water.

9. GLOBAL KITCHEN

Each year, the campus community takes a culinary trip across the world via Global Kitchen: An International Dining Series. Hosted by Panther Dining Hall, the series features monthly buffet-style dinners offering authentic foods from different regions and countries. To ensure authenticity, each food is tasted, tested and approved by Florida Tech students and staff from the featured region. The international cuisine is also accompanied by related educational materials posted in the dining hall, together with sights and sounds from the featured area.

Continued on page 28



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10. FOUNDER'S DAY

On Sept. 22, 2023, Florida Tech kicked off its year-long 65th anniversary celebration at the Founders Day Ice Cream Social, where President John Nicklow joined university leadership in serving up treats to the campus community. The following day, Student Life hosted its Founders Day Celebration, featuring amazing performances from the Pep Band and Spirit Squad, live music, botanical garden tours, lots of food and fun activities.

11. INTERNATIONAL EDUCATION WEEK

In a combined effort between several campus organizations, Florida Tech hosted its first International Education Week in February 2023. Celebrating diversity among our 27% international student body, Panthers came

together for a full week of activities and events, including an International Fair, a Cultural Competency Workshop, an alumni lecture by Juan Moreno '87 and more.

12. ALL-MAJORS CAREER FAIR

The university's September 2023 All-Majors Career Fair, hosted by Career Services, gave students the opportunity to speak one on one with over 60 employers. Happening once a semester, the fair is a great way for students to build connections, make acquaintances and get their feet in the doors at some of the nation's most sought-after companies.

13. TREAT OR TREAT

Florida Tech welcomed about 1,800 community members to Treat or Treat 2023, the popular Halloween event hosted by Student Life and Residence Life each October on the Residence

Hall Quad. Five residence halls were converted into themed haunted houses of varying spookiness, ranging from scare-level-0 "Pete and his MARVELous Friends" in Shaw Hall to scare-level-4 "In-Sanitarium" in Grissom Hall. The event also featured a trick-or-treating area, costume contests, inflatables, games and a crafting center.

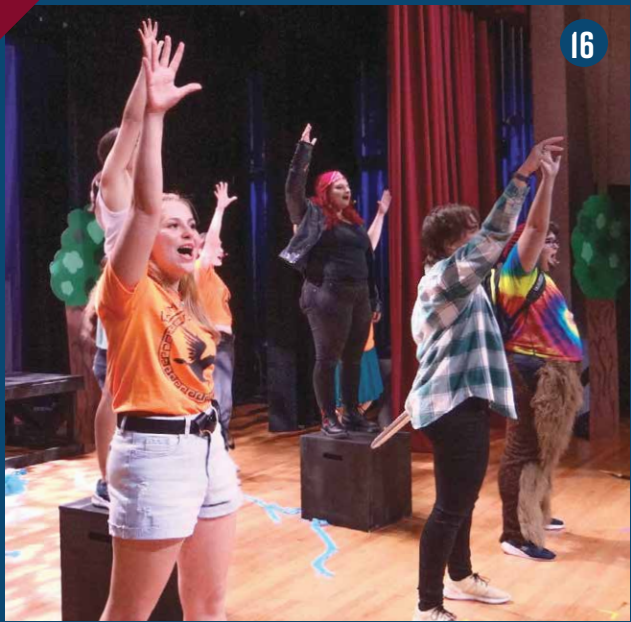
14. A DAY IN THE LIFE OF THE INDIAN RIVER LAGOON

In October 2023, Florida Tech students and faculty once again partnered with the Ocean Research and Conservation Association's (ORCA) sixth annual A Day in the Life of the Indian River Lagoon event. This community-based citizen science and experiential research program allows students, teachers and environmental partners to collaborate in gathering water-quality data and

biological inventories at over 40 locations in six counties along the 156-mile estuary. At the event, Florida Tech teamed up with Central Middle School to examine the oyster mats at Ryckman Park in Melbourne Beach, part of the university's Living Docks program.

15. BIG DAY OF SERVICE

Big Day of Service is an annual event that brings together students, faculty, staff and more to participate in community service benefiting local charities. In 2023, nearly 170 participants packaged about 8,000 hygiene kits for the Brevard County homeless community. The university partnered with United Way of Brevard and other community groups to ensure those essential kits found their way to those who needed them most.



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16. COLLEGE PLAYERS: "THE LIGHTNING THIEF"

The Florida Tech College Players is a student-run organization in which students are the directors, producers, set designers and actors of a play or musical performed each semester on campus. In fall 2023, the group brought "The Lightning Thief: The Percy Jackson Musical" to campus in grand fashion, putting on seven performances for more than 1,000 community members/showgoers.

17. CAMID HIGH-TECH PUMPKIN CARVING

In October 2023, the Center for Advanced Manufacturing and Innovative Design (CAMID) presented its third annual High-Tech Pumpkin Carving Contest. CAMID provided pumpkins to the teams, who carved them and were then judged based on creativity, visual impact, craftsmanship



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and use of technology/advanced manufacturing. The first-place team, Spooked in SPACE, utilized a combination of breadboards, LEDs and RFID technologies in its design.

18. MUSIC TO YOUR EARS

Team building. Communication. Expression. No matter their major, all students can benefit from developing these skills, and at Florida Tech, we offer just the program to do so: music. The music program provides a creative and engaging environment for musicians ranging from beginners looking to learn a new instrument to experienced performers eager to continue honing their already advanced skills. For years, this creative complement to the university's tradition of science and research has set Florida Tech graduates apart as

competent, confident individuals prepared for life outside of college.

19. ATHLETICS FOR ALL

At Florida Tech, you don't have to be a college athlete to stay active. In fact, 60% of undergraduate students participate in one or more of our intramural athletics and club sports, ranging from basketball to Ultimate Frisbee to ice hockey and more. And no matter the time of day, the 58,000-squarefoot Clemente Center for Sports and Recreation, which includes varsity and intramural gyms, a recently updated fitness center with state-of-the-art equipment, various multipurpose and aerobics rooms, a Starbucks and a café, is always bustling.

20. FINAL FOUR

Florida Tech's 2023 soccer season was one for the record books, as both

the men's and women's teams reached the Final Four, becoming the first Division II school to have both teams reach the national semifinal since 2007. It was the teams' first berths since 2010 and 1993 for the women and men, respectively. National Player of the Year Sjur Dreschler led the men, while All-American Marem Ndiongue led the women, and the teams' successes contributed to Florida Tech earning its highest-ever ranking—No. 20—in the LEARFIELD Directors' Cup standings for Division II after the fall 2023 semester.

A DAY IN THE LIFE OF A FLORIDA TECH SCHOLAR-ATHLETE

AN NCAA DIVISION II SCHOOL, FLORIDA TECH NOT ONLY OFFERS AN EXCEPTIONAL EDUCATION, BUT ALSO BOASTS 15 MEN'S AND WOMEN'S TEAMS THAT COMPETE IN THE PRESTIGIOUS SUNSHINE STATE CONFERENCE.

HAVING TO BALANCE RIGOROUS COURSEWORK WITH A HIGH-LEVEL SPORT IS NO EASY FEAT. BUT WHAT DOES A DAY IN THE LIFE OF A FLORIDA TECH SCHOLAR-ATHLETE REALLY LOOK LIKE?

WE TALKED WITH A COUPLE PANTHERS TO FIND OUT.



Marshall Burke begins his morning with a 9 a.m. calculus class.

"I came to Florida Tech on an academic visit," he says. "I had a break from school, and my brother goes to school in St. Augustine, so I drove down the coast and looked at all the schools. I scheduled an academic meeting because I saw what this school was doing in and for the future. The placement rate was big for me, and I fell in love with the coast—fell in love with Florida."

Marshall is originally from Kingwood, Texas.

He follows calculus up with two more classes related to his ocean engineering major. He then takes a short break to eat before heading to baseball practice from 2:30 p.m. to 4 p.m.

"It's something I've always done," says Marshall, as he thinks about why he loves the sport. "I don't really know any better. My dad played baseball, and my brother plays baseball, so it's kind of just been part of my life. It's just something I love and that I've always loved."

Marshall has another short break after practice before his weightlifting session at 5 p.m.

"Time management is a huge thing," he says. "Fitting all the things in my schedule and doing them as best as possible is a hard thing that you have to learn."

Marshall is also involved with the Melbourne chapter of the Fellowship of Christian Athletes.

As the end of fall nears and winter approaches, baseball scrimmages begin. If it's a Thursday or Friday, Marshall leaves his lifting session and goes to scrimmage from 6 p.m. to 9 p.m.

"The coaches are very good," Marshall says. "One of the first meetings we had, they said, 'I'm not here for baseball, I'm here for you.' That was big, and it kind of grows a relationship with your coaches, knowing that they're not just a coach, but they know you're a human being."

After practice or scrimmage, Marshall heads home to work on any assignments and study before going to sleep.

"You have to put academics first because baseball is not something that's going to last," he says. "I've always been hands-on my whole entire life. I knew I wanted to be in some sort of engineering or construction management. I've always loved the ocean—always going to the beach my whole entire life. So ocean engineering fits."

While in high school, Marshall was the lead designer and architect on a two-year project that involved building a tiny house for a homeless veteran. The experience sparked his love of leading and hands-on creating.



Debora Xavier dives into the pool at the Panther Aquatic Center at 5:30 a.m. almost every day for swim practice.

"It's part of who I am," she says, as she considers why she swims. "I love swimming because it shows me how much I can do. It shows me how much potential I have, not just in school but in something else."

After morning practice, Debora usually heads back home to get a bit more rest before eating and heading to her hourlong weightlifting session.

"I chose Florida Tech because I wanted to be in a place where it's warm, and where I could be successful in my swimming," she says. "I really like the coaches here. The way they talk and make adjustments to practice, and they like to meet up and get to know you better. I know it's a cliché, but it's more like a family than just a team."

Once she's done lifting, Debora grabs another bite to eat and then heads to her psychology classes for the day.

"There was a sports psychologist who helped me a lot," she says. "I understood that I can do whatever I want to do if I just train my brain to do it—it doesn't matter how hard it

is. I want to help all athletes like that."

Once classes are finished, Debora heads back to the pool to continue practicing from 3:30 p.m. to 5 p.m.

"With swimming, I learned with my own experience about athletes and our mental health," she says. "With school, I learned about the clinical side and how to approach the problems I see with my experience. Florida Tech is really good about research, and I've learned a lot of things I didn't know before."

After her second practice, Debora heads home to work on her assignments and get some rest.

"If you're looking for a high-achievement school—having higher-thinking classes and also having higher-level practice—I think this is the best place to be," she says.

Debora also serves as the vice president of BRASA, Florida Tech's Brazilian Student Association, and is a leader with the Melbourne chapter of the Fellowship of Christian Athletes.

I REALLY LIKE THE COACHES HERE. THE WAY THEY TALK AND MAKE ADJUSTMENTS TO PRACTICE, AND THEY LIKE TO MEET UP AND GET TO KNOW YOU BETTER. I KNOW IT'S A CLICHE, BUT IT'S MORE LIKE A FAMILY THAN JUST A TEAM.

—Debora Xavier

ESPORTS

FLORIDA TECH

■ THE BIG PICTURE

ESPORTS

In 2021, Florida Tech Esports entered the collegiate esports landscape with one distinct advantage: the Esports Center. One of few stand-alone collegiate esports buildings in the country, the center houses a competitive stage, community gaming room and console

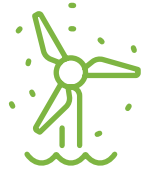
room, where all students are welcome to game casually through the esports club, intramural offerings, community nights and more. The center serves as both a varsity training space and a classroom for the university's cybersecurity program. It is fully furnished—Xbox and PlayStation

consoles, Nintendo Switches, 36 OMEN gaming stations with RAZER peripherals, LED lighting and comfy gaming chairs—FREE and open to the entire Florida Tech community, from competitive and casual gamers to spectators and study-breakers.

SUSTAINABILITY



IN A WORLD FRAUGHT WITH ENVIRONMENTAL AND ECONOMIC CHALLENGES, GRADUATES WITH SUSTAINABILITY SKILLS ARE IN HIGH DEMAND. By Adam Lowenstein



WITH AN UNPRECEDENTED SURGE IN SUSTAINABILITY-RELATED JOBS IN THE U.S. AND BEYOND, STUDENTS OF FLORIDA TECH'S UNIQUE, STEM-BASED SUSTAINABILITY PROGRAM HAVE NO SHORTAGE OF OPPORTUNITIES.



"WHAT'S HAPPENING IN THE LAST FIVE TO 10 YEARS IS THAT THE LARGER CORPORATIONS, AND INCREASINGLY THE MIDSIZED CORPORATIONS, ARE LEANING INTO SUSTAINABILITY AND RESILIENCE," SAYS KEN LINDEMAN '80, A RECENTLY RETIRED OCEAN ENGINEERING AND MARINE SCIENCES PROFESSOR WHO BUILT FLORIDA TECH'S SUSTAINABILITY PROGRAM.



THE RISE IN SUSTAINABILITY OPPORTUNITIES IS ABOUT MORE THAN JITTERY COMPANIES

PROTECTING THEIR BOTTOM LINES WITH NEW RECYCLING PROGRAMS OR A NEWLY HIRED RESILIENCE COORDINATOR. THE RISE IN SUSTAINABILITY-RELATED JOBS IS SOCIETAL, GENERATIONAL AND ECONOMIC.

ONE FACTOR IS THE WORKFORCE ITSELF AND ITS INFLUENCE, SAYS ECONOMIST AND NATHAN M. BISK COLLEGE OF BUSINESS PROFESSOR MICHAEL SLOTKIN. YOUNGER WORKERS HAVE NOT BEEN FORGED BY ECONOMIC DEPRESSIONS AND ARE NOT NECESSARILY MOTIVATED ONLY BY FINANCIAL GAIN AND THE SECURITY THAT COULD BRING.

"THEY WANT TO HAVE A PURPOSE," SLOTKIN SAYS. "YOUNG WORKERS ARE GOING TO CHECK OUT

UNLESS THEY VIEW THEIR COMPANIES AS TRYING TO DO SOMETHING IN A PARTICULAR AREA. THEY WANT TO BELIEVE IN WHAT THEY ARE DOING AND WANT THE COMPANY TO TAKE A STAND."

AND AS AWARENESS OF COMPANIES' BENEFITTING FROM CLIMATE-RELATED DECISIONS GROWS, OTHERS ON THE FENCE MAY BE OPTING IN.

"COMPANIES NOW UNDERSTAND THAT IF THEY DO THIS A LITTLE BIT OR TRY, THEY CAN OBTAIN COMPETITIVE ADVANTAGES, IMPROVE COMMUNITY RELATIONS AND IMPROVE RISK MANAGEMENT," LINDEMAN SAYS. "AND THERE'S DATA THAT SHOW THEY RECRUIT AND RETAIN BETTER EMPLOYEES."

ON THE JOB

Zachary Eichholz '16, '19 M.S., the 30-year-old chief resilience manager for the City of Cape Canaveral, has known only the sustainability profession since he graduated from Florida Tech in 2019 toting a bachelor's degree in sustainability studies and a master's degree in interdisciplinary sciences. It wasn't hard to find motivation.

"I don't think it's naïve to say that this is our generation's moonshot. Younger individuals, I believe, are a little more adaptable than our predecessors just because of the sheer number of things that have happened across the world in the 21st century," he says, naming two once-in-a-generation economic crises, the global COVID-19 pandemic and the horrors of 9/11 that started the century.

"Climate change has been creeping up in the back that entire time," he says. "We are the generation that sees the challenges head on, and this has galvanized us, on the flip side, to react and be proactive to remediate these issues."

Zachary came to Florida Tech with a different path in mind. Though he was aware of environmental issues and started with plans to minor in sustainability, the Florida native was fascinated by hurricanes and originally planned to earn a degree in meteorology.

Amid all of this, Zachary couldn't help but see that what he calls "the green path toward sustainability" would offer a more fulfilling career while still allowing him to explore some facets of meteorology. When Florida Tech launched its sustainability major program in fall 2013, he was all in.

With a sustainability internship for the City of Satellite Beach that Lindeman helped arrange—as he would continue to do at multiple Brevard County cities for students—Zachary saw the potential of this profession.

"I could kind of see early on that cities, counties, private companies would probably start to embrace this stuff as more and more issues came about that needed to be addressed," he says. "You could tell there would be a lot of opportunities, and it would be quite expansive."

Like Zachary, Nicole Barnett '21 entered Florida Tech with a different major, environmental science. She hadn't heard of sustainability studies, but when she learned more about it and its mix of STEM and business courses, the fit was there.

"This is kind of exactly what I am interested in," she remembers thinking. So, she changed her major. "I

jumped on this train, and I love it."

Starting in the second semester of her junior year, she interned for the City of Palm Bay, a period she called "the biggest catapult in my educational career."

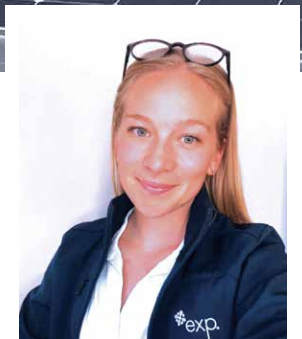
She was instrumental in the development of the city's first sustainability action plan, working closely with city staff and the Sustainability Advisory Board.

That process allowed her to work in public policy and understand how sustainability and related practices function in a municipal setting, both critical skills for her future employment.

Today, Nicole is a municipal sustainability planner at EXP, a multinational firm providing engineering and design services, where she provides sustainability input on projects along with input from engineering, design and other areas. She also works



Above: Zachary Eichholz '16, '19 M.S., deputy community and economic development director and sustainability manager for the City of Cape Canaveral, with the city's first solar array atop the community center. Right: Nicole Barnett '21.



on credentialing buildings to become LEED certified.

"Every project has some sort of resiliency or sustainability component," she says. "Net-zero [energy], like our alumni center on campus—all of these things Florida Tech has that I've been exposed to help me be familiar with terms of industry."

In his role, Zachary has helped take Cape Canaveral forward in substantial ways. A leading example is the city's community center. Opened in September 2022, the nearly 25,000-square-foot facility was designed with a modern, window-heavy sensibility and a 72-panel rooftop solar array, the city's first.

Zachary has also led efforts to install a network of remote sensor sites across the city to measure weather data and tide levels.

The network has allowed city officials to see events as they happen and, equally important, respond in real time. It also provides useful data to use when designing and engineering new buildings.

This has resonated with many residents, who have expressed themselves during

the city's ongoing development of its sustainability and resiliency plan, the Cape Canaveral 2063 Program, which informs the city's broader sustainability and resiliency program.

IT IS VERY ENLIGHTENING, EMPOWERING AND VALIDATING TO SEE RESIDENTS SAY, 'I THINK WE NEED SOME CHANGES. I WANT TO LIVE HERE, HAVE A CITY THAT IS LIVABLE, VIABLE AND SAFE—WHAT ARE YOU GOING TO DO?'

—Zachary Eichholz '16, '19 M.S.

"It is very enlightening, empowering and validating to see residents say, 'I think we need some changes. I want to live here, have a city that is livable, viable and safe—what are you going to do?'" he says.

CHALLENGES AHEAD

With about 20% of Florida coastal municipalities now featuring sustainability and/or resiliency staff, and likely similar or smaller percentages across the country, Lindeman says local government should be a landing spot for many new workers in the field.

"In urban areas in Florida, the city planners and city managers have to deal with the reality on the ground, the impacts of now sunny-day high tides that are flooding streets in multiple areas and many other issues further below the surface," he says. "These positions are needed."

One way to boost sustainability traction is to monetize the process, which Nicole describes as, "making it attractive to get things done but turning the change into a profitable and attractive investment for industry."

That approach, such as giving builders credits for making their structures energy efficient, can help normalize sustainability practices, Lindeman says.

"The way you do that is by monetizing the good and

creating jobs that have an implicit, if not explicit, role in monetizing the good," he says.

Are there downsides to being sustainability professionals and being knee-deep in forecasts of rising seas, rampant high temperatures, violent storms and the like?

The phenomenon of climate anxiety is real, Zachary says.

But they draw encouragement from, what all involved hope is, growing public support.

"By basically catalyzing your efforts into action, doing projects and initiatives on the ground no matter how small or what scale of government or private company you're in, making a difference day in and day out—that is a way to make an actual difference and keep your own mindset positive and strong," Zachary says.



*Actual photos of selections from Florida Tech dining locations. Yum!

TASTES OF FLORIDA TECH

Homestyle helpings? ✓

Grab-and-go goods? ✓

Sweet treats and savory snacks? ✓

With more than 10 convenient locations offering a variety of dining atmospheres and menus, you can find flavors for every taste right here, on campus!

1. **Twisted Bliss Smoothies** for a post-workout cool down
2. **Starbucks** for an afternoon pick-me-up
3. **Einstein Bros. Bagels** for a breakfast of champions to start the day off right or a lunch to fuel your afternoon
4. **Firehouse Subs** for a signature sandwich. Try the brisket sub, a campus favorite!
5. **Panther Dining Hall** for a hearty homestyle meal—all-you-can-eat buffet style!
6. **Rathskeller Pizza and Grill**—or “The Rat” as it is affectionately known on campus—for a burger, a slice and a late-night hangout
7. **Center Court** for a between-classes snack to go
8. **Cosmic Creamery** for freshly churned ice cream with out-of-this-world toppings. Try the Panther Tracks, it’s a rite of passage!

SPACE COAST BUCKET LIST

Florida Tech is a one-of-a-kind school in a one-of-a-kind locale. Whether you're here for a visit, for your college career or for life, here are a few must-dos to add to your Space Coast bucket list.

VISIT THE JOY AND GORDON PATTERSON BOTANICAL GARDEN.

A stream bordered by a shady hammock abounding in palm trees and other tropical growth winds through the heart of Florida Tech's campus and is the setting for a 15-acre botanical garden.

Take a stroll, and see what wildlife you can spot!



KAYAK ONE OF OUR WATERWAYS.

With the Indian River Lagoon spanning over 150 miles and branching off into various streams and creeks—such as

the always beautiful Turkey Creek—kayaking around Melbourne is a must-do.

HIKE OUR NATURE TRAILS.

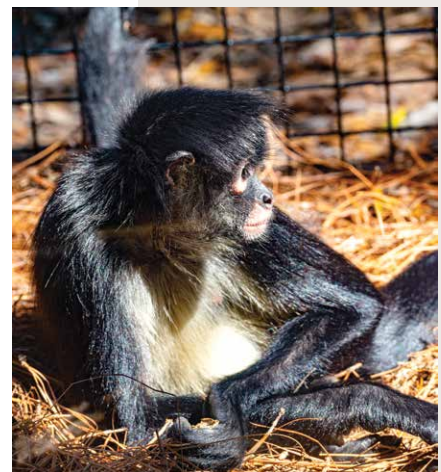
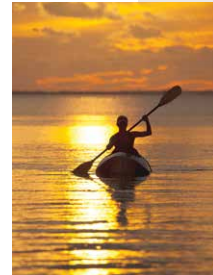
What's the best way to experience Florida's flora and fauna? Exploring nature trails, of course. Luckily for those in Melbourne, there are many choices. Just minutes north of Florida Tech's campus awaits Erna Nixon Park, which is great for a light walk. Ten minutes south of campus, you'll find the popular Turkey Creek Sanctuary, which boasts a 1.85-mile boardwalk that floats above the mystical Florida hammock, and around 1.5 miles of jogging trails that take you through the native forest, not to mention 8-plus miles of mountain biking trails.

EXPLORE SEBASTIAN INLET.

Want the ultimate beach day? Look no farther than Sebastian Inlet State Park. A 30-minute drive south of campus, Sebastian Inlet is a great spot for beautiful beaches, fishing, scuba diving, snorkeling and surfing—plus grills for barbecuing!

TOUR BREVARD ZOO.

Brevard Zoo is an absolute must-do! This gem on the Space Coast provides education, fun and entertainment for everyone. With lush, open-air habitats that are home to over 900 animals, the fun continues with animal feedings, kayak tours, train rides, aerial adventures and more.



LOOKING FOR MORE? YOU SHOULD ALSO CHECK OUT:

BREVARD BEACHES

- Cocoa Beach
- Canova Dog Beach
- Indialantic Beach
- Melbourne Beach
- Satellite Beach

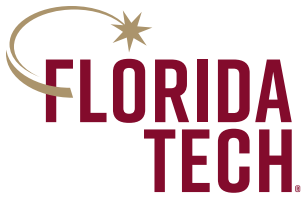
THEME PARKS

- Walt Disney World
- Universal Studios
- SeaWorld Orlando
- Andretti Thrill Park
(walking distance from campus)
- Route 7 Adrenaline Warehouse
(20-minute drive from campus)

ARCADES/CAFES/ ENTERTAINMENT

- Arcade Monsters
(short drive from campus)
- Historic Downtown Melbourne
- Eau Gallie Arts District

BONUS: BE ON THE LOOK-OUT FOR THE DR. MARY HELEN MCCAY RESEARCH SHED IN THE PRIMATE COGNITION CENTER. THERE, YOU'LL FIND SCHOOL OF PSYCHOLOGY ASSOCIATE PROFESSOR DARBY PROCTOR WORKING WITH SOME PRETTY CUTE SPIDER MONKEYS!



Office of Undergraduate Admission

Florida Institute of Technology
150 W. University Blvd.
Melbourne, FL 32901-6975



65 YEARS AND COUNTING

On Jan. 26, Florida Tech hosted the presidential investiture of John Nicklow, Ph.D.

Not only did this officially install Nicklow as the university's sixth president, but the event is one of many celebrating Florida Tech's 65 years of excellent education, revolutionary research and inspiring innovation. This university that began its life as "Countdown College" has rocketed into stardom from humble beginnings as a "night school for missilemen."

Today, with a campus that spans 130 subtropical acres and boasts a 15-acre botanical garden, as well as several state-of-the-art facilities, both academic and recreational, and cutting-edge research laboratories, Florida Tech has burgeoned into a premier scientific and technological university whose impact reaches around the globe.

In these 65 years, more than 70,000 alumni have shared their passion, brilliance and #PantherPride through outstanding contributions in industry, education and public service. Let us celebrate the bold vision of our distinguished new president, the boundless potential of our university and our shared journey forward—together.