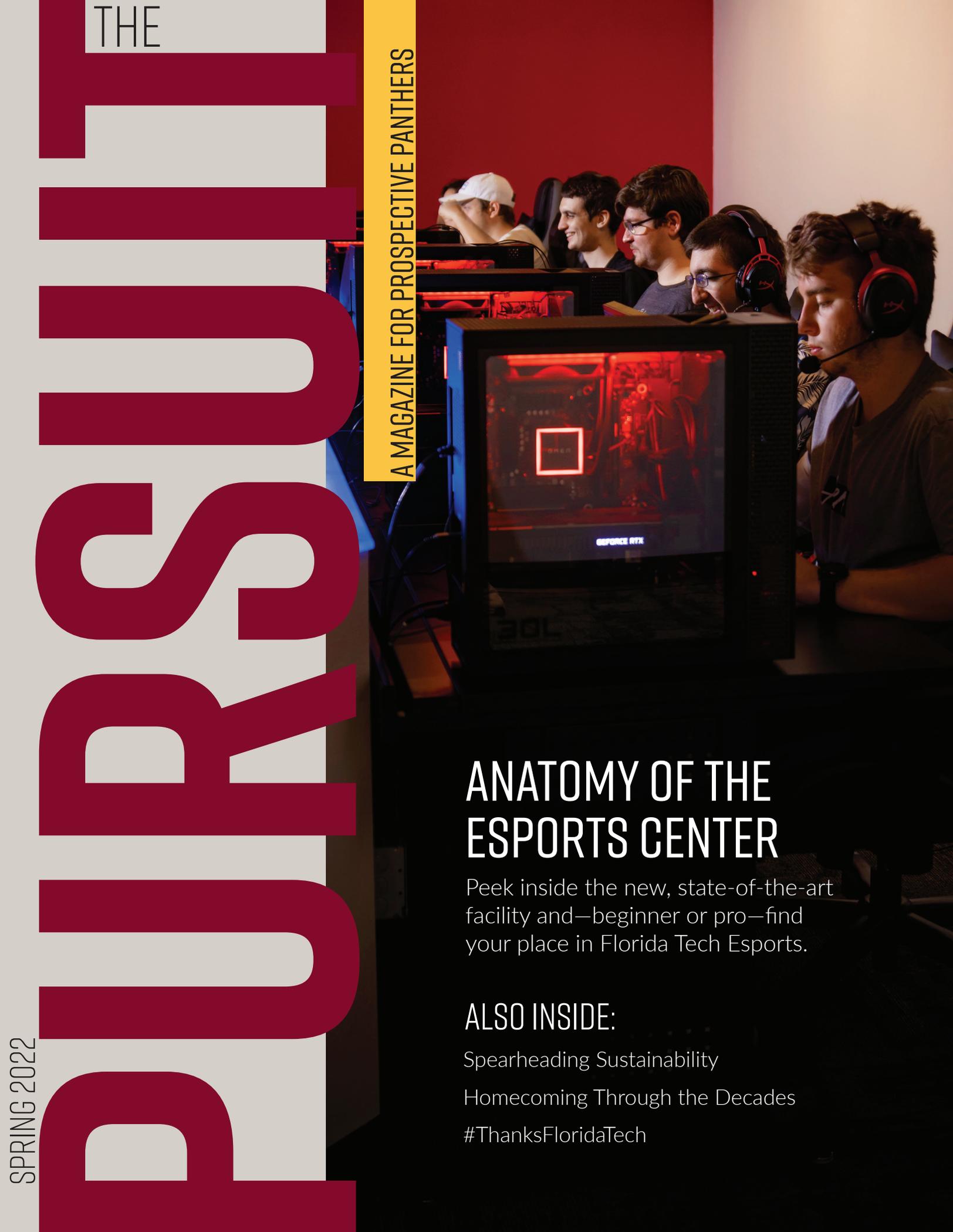


SPRING 2022

THE FLORIDA TECH

A MAGAZINE FOR PROSPECTIVE PANTHERS



ANATOMY OF THE ESPORTS CENTER

Peek inside the new, state-of-the-art facility and—beginner or pro—find your place in Florida Tech Esports.

ALSO INSIDE:

Spearheading Sustainability

Homecoming Through the Decades

#ThanksFloridaTech

INSIDE THIS ISSUE

03 MY WHY: SPACE ROOTS

04 LIFE AT FLORIDA TECH

06 ANATOMY OF THE ESPORTS CENTER

08 MISSION: POSSIBLE

10 MY WHY: LOCATION

11 TASTES OF FLORIDA TECH

12 PANTHERS ON THE RISE

16 MAKING THE MOST OF ORIENTATION

17 MY WHY: HANDS ON

18 LEARNING OUTSIDE THE CLASSROOM

20 INTERNSHIPS FOR THE IN-DEMAND

22 THE SCENE

26 MY WHY: FLIGHT

27 ELECTIVES OUTSIDE THE BOX

28 SPREADING SUSTAINABILITY

30 #THANKSFLORIDATECH

32 DIGITAL TWINNING

33 MY WHY: RESEARCH

34 HOMECOMING THROUGH THE DECADES

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SPACE ROOTS

“Florida Tech stands out from other universities in my mind because of how interconnected we are with the space industry. Many universities offer an education in space-related fields, such as my studies in aerospace engineering, but none can claim to have roots in the space industry as deep as ours. Having been founded the same year as NASA to educate the next generation of space industry workers, Florida Tech has the background, know-how and connections to set me up for a

**SUCCESSFUL
FUTURE CAREER**

in the aerospace industry.”

—Jacob Smith, B.S.
aerospace engineering



LIFE AT FLORIDA TECH



THIS IS FLORIDA TECH

Founded by a rocket scientist working at Cape Canaveral (now NASA - Kennedy Space Center) in 1958, Florida Tech is proud to share a rich history and deep connection with the U.S. space program, commercial space initiatives and partner agencies. To kick off Florida Tech's "The College Tour" episode, astrobiology student **Alyssa Carson** (who is an aspiring astronaut) talks about Florida Tech's founding and how it makes this university the ideal place to launch her career.



AN UNBEATABLE LOCATION

Florida Tech's campus in Melbourne, Florida, is a short drive from the beach, Kennedy Space Center and big opportunities! In this segment, Ph.D. student **Maria Sagastume '18, '19 MBA**, talks about the well-balanced lifestyle that comes with attending college on Florida's sunny Space Coast.



ENGINEERING EXCELLENCE

Founded as Brevard Engineering College, engineering has always been a part of Florida Tech's DNA. **Giulio Cristello '20**, who earned a bachelor's degree in aerospace engineering and is now pursuing a master's in systems engineering, talks about the hands-on experience you can expect to get as an engineering student at Florida Tech.



The College Tour ▶

Florida Tech is featured as part of a new Amazon Prime Video series called "The College Tour." In fact, we're the second episode! In it, 10 awesome Florida Tech students share their stories about living and learning at our great university. Learn about our hands-on degree programs, life on campus and what it means to be a Florida Tech Panther. We'll take you underwater, into the sky, behind the wheel of a jet dragster, to Mars and more! Scan the QR code to watch the full episode or individual segments:



PANTHER PRIDE AND ATHLETICS

Gennaro Zappariello, a member of the crew team, tells you what being a student-athlete at Florida Tech is all about.



CAMPUS LIFE

You'll never run out of clubs to join or things to do at Florida Tech! **Tanner Crampton**, a student ambassador and a member of Greek life, discusses all of the exciting opportunities that await you.

GLOBAL CONNECTIONS

Students from more than 80 countries worldwide choose to live and learn at Florida Tech, making us a truly global university. Listen in as **Tij Vishwakarma '20** details his experience as an international student.



INSPIRING RESEARCH

Research fuels Florida Tech. **Delaney Lisco '21**, a biomedical engineering alumna, can attest to that. Listen as she details how hands-on research has benefited and shaped her college experience.



MEANINGFUL MENTORSHIP OPPORTUNITIES



Florida Tech is a tight-knit community. **Emily Almodovar Warner '21** chose this university for that very reason. Now, she has access to unique opportunities she couldn't get anywhere else.

WE FLY PLANES



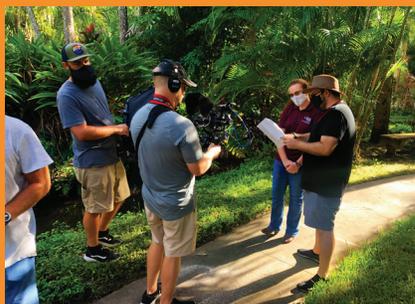
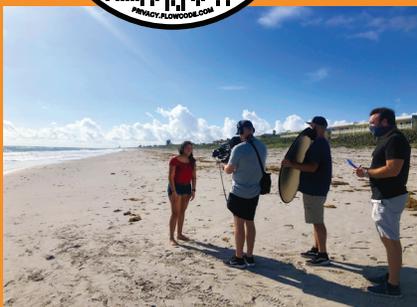
Greg Dunn, a Florida Tech student majoring in aeronautical science with flight, tells us one thing that sets Florida Tech apart from other colleges: We fly planes. F.I.T. Aviation offers the very best in aviation education for future pilots who aspire to achieve distinction and excellence as professional aviators.

UNIQUE OPPORTUNITIES—HOW IT ALL COMES TOGETHER



Learn how all the opportunities at Florida Tech come together by connecting students' academic interests with their career goals, often leading to dream jobs. Business administration student **Loghan Ashline '21** shares her unique college experience.

BEHIND THE SCENES



ANATOMY OF THE ESPORTS CENTER

Esports is a growing and increasingly popular facet of the collegiate experience. When Florida Tech launched its esports program in March 2021, there were at least 10 other universities in the state with esports programs. But Florida Tech Esports entered the arena with **one distinct advantage**: the Esports Center. One of few stand-alone collegiate esports buildings in the country, the center is fully furnished and open to the entire Florida Tech community—from the competitive and casual gamers to the spectators and study-breakers.

After six months of renovation, the center opened for campus use in September 2021. While the remodel continues, sneak a peek at the fun, fresh, first-class space now.

FIRST FLOOR

+ ENTRANCE

Located in the Ruth Funk Center between Evans Library and the Denius Student Center

+ WELCOME DESK

Tap your Panther ID on the card reader, and head upstairs.

SECOND FLOOR

+ CONSOLE ROOM

Consists of three gaming areas, each with a 42-inch flat-screen TV. Use in-house Xbox One, PlayStation 4 and Nintendo Switch consoles, or bring your own for “plug and play!”

+ COMPETITIVE STAGE

Replicating event stage setups, LED lighting, 12 OMEN gaming stations in six-versus-six format and a video board for spectators comprise the perfect space for hosting campus or intercollegiate competition.

+ COMMUNITY GAMING ROOM

AKA the “PC Café,” houses 24 OMEN gaming stations, two 42-inch flat-screen TVs and comfy gaming chairs for casual gaming, club practice and even classes or meetings.



ENGAGE IN ESPORTS

“Esports has a place for everyone!” says Dana Hustedt, Florida Tech Esports director and the first woman to lead a collegiate esports program. “Whether you are a gamer or not, esports has career pathways, supporting roles, coaching, data analytics, design, production and broadcast, nutrition and player development, mental health and wellness and so much more for people to get involved in.”

COMPETITIVE TEAM

Junior varsity and varsity teams in select titles to represent in national collegiate competition.

CLUB TEAM

Student-led community of casual gamers with similar interests and an affinity for friendly competition.

ESPORTS CENTER

Read that.

NONPLAYER ROLES

Content creation, production and broadcast, data analysis, team management and so much more!

EVENTS

Student engagement and programmed tournaments, like Super Smash Bros. Saturdays and Minecraft Sundays, open to all Panthers.

STUDENT EMPLOYMENT

Join the operations team!

INTERESTED?

Once you apply to Florida Tech, let us know:
admissions.ft.edu/register/esports_interest





MISSION: POSSIBLE

BREAKING INTO THE WORLD OF COMPETITIVE CYBERSECURITY, ONE HACK AT A TIME

Sometimes, adrenaline runs high.

Competition is down to the wire, with just minutes remaining when the solution strikes you. You race to decode a cryptic image and spend the last 30 seconds hastily deciphering Morse code while your teammate enters it as quickly as his fingers can type.

Other times, it's 3 a.m., and you realize you've been staring at the same piece of code for eight hours.

Such is the nature of cybersecurity, and **Josh Connolly '21** loves it.

In 2019, Josh founded Florida Tech's cybersecurity competition team, FITSEC, with a group of three or four of his computer engineering peers, atypical for cybersecurity competition teams, which usually consist of computer science students.

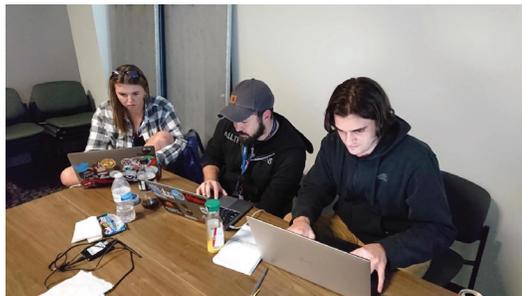
In the beginning, they would meet twice weekly for a lesson Josh created based on the type of competition—capture the flag (CTF), penetration testing or cyber defense—that would be coming up next.

Josh quickly recognized the need to hone the team's focus on just one competition type, deciding on CTF due to its more transferable skill set and greater competition frequency.

In CTF competitions, teams or individuals complete as many of the posed challenges as possible in an allotted time frame, usually 48 hours. Challenges incorporate topics like open source intelligence, cryptograph, log analysis, network traffic analysis, enumeration/exploitation and more. After completing a challenge, competitors retrieve a "flag," which they then turn in for points. The team or individual with the most points wins.

"In the beginning, it was rough because we had no idea what we were doing. Our goal was just to not get last place," Josh says. "We might spend 10 hours on a single problem, but we would learn things that would help with the next competition."

This baptism-by-fire approach worked for FITSEC, judging by the titles and trophies the team has racked up, including several top 10 placements and a first-place ranking in the National



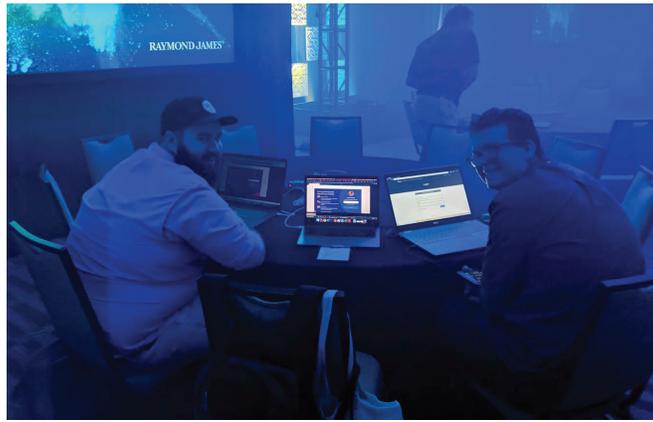
Cyber League, a national competition that consists of more than 6,000 competitive cybersecurity players.

In just a few years, FITSEC has grown to about 50 active members and has participated in more than 30 competitions of varying size, difficulty and scope. Members have traveled to places like Augusta, Georgia, and Argonne National Laboratory in Chicago. They've competed against fellow college students and cybersecurity professionals alike, and once participated in an international competition in which they hacked an actual functioning satellite.

"It's like the NCAA tournament for cybersecurity students," says Dr. TJ O'Connor, cybersecurity program chair and FITSEC faculty advisor. "The thing that's most important to me as a faculty member is education. So, any alternate means of education that can excite students who wouldn't otherwise be excited, or take students who are somewhat excited and force them to dive deeper into a topic by themselves, I absolutely love."

Having joined Florida Tech's faculty in 2019 after 20 years in the military, O'Connor focuses his research on two areas: cybersecurity education and internet of things (IoT) security of household items.

In his IoT Security and Privacy Lab, he and his students have conducted experiments on smart home products, like speakers, doorbells, backdoor cameras and more, finding their vulnerabilities and actually hacking into them. Then, instead of using the access to harass, intimidate, stalk or hurt people like malicious hackers do, O'Connor and his students notify the vendors and even suggest means of improvement when they can.



"I think we're at kind of a crucial point, where there are a lot of things that are coming into our houses—everything from the scales people use to the coffee maker to the garage door opener to the lock that secures our house to the camera system—and we're embracing a lot of these things without once looking at them," O'Connor says.



DR. TJ O'CONNOR

In some cases, these experiments have proven lucrative, with students receiving fairly substantial monetary awards from grateful smart home device vendors.

This hands-on approach with real-world application ties into his second area of research: education.

In addition to developing ways to make cybersecurity education accessible to diverse groups of people, and at a younger age, O'Connor's research aims to get students excited about and prepared for cybersecurity careers.

"Computer security is a hard thing to study, and there's a lot of time spent changing a one to a zero and a zero to a one, and it can be fairly boring," O'Connor says. "But I think students are finding that there's a lot of fun to be had in attacking devices. And as a professor, I'm really excited to see that they're

learning the fundamental concepts at a quicker, faster rate, and it's being reinforced by the enthusiasm of studying consumer devices."

Such is the methodology of the courses he has created for Florida Tech's cyber operations concentration.

Established in 2020, the cyber operations concentration builds upon the computer science bachelor's degree program by adding six courses focused on tools and techniques for investigating, analyzing and responding to cyberattacks.

The concentration is part of Florida Tech's efforts as a National Security Agency (NSA) Center of Excellence for Research, a program managed by the NSA's National Cryptologic School.

"The concentration introduces you to different cybersecurity concepts, basically giving you knowledge of the tools you'll be dealing with and how they work through hands-on engagement," says **Liana Villafuerte '21**, one of the first two students to graduate with the concentration. "Dr. O'Connor made this his baby because he wants students to understand how fun cybersecurity can be."

Liana chose to major in computer science her freshman year because of her lifelong interest in gaming. But after taking Introduction to Cybersecurity, she quickly changed course.

"I just fell in love with it," she says. "Every lab is a challenge. But it's a good challenge—one where you're like, 'Oh, I want to beat this.'"

Although never a FITSEC member, Liana competed in her first cybersecurity competition in February 2021. At the women-only CTF event, where she competed against thousands of cybersecurity industry experts, she felt prepared.

"The courses in the cyber operations concentration definitely contributed to everything I was doing," she says. "Before Florida Tech, I knew little to nothing about cybersecurity—I just knew it was a thing and involved protecting a computer, but I didn't know how in-depth it worked. Everything I've learned in class applied to this CTF and more."

Her coursework paid off in the real world, too, when an essay she wrote about reversing the internet of things for her Introduction to Cybersecurity class helped land her an internship with ICR Inc.—an opportunity that eventually turned into a full-time job offer.

"Watching students excel is the fun part of being faculty—and we're only getting started," O'Connor says.

Based on FITSEC's rapid success, O'Connor was selected as head coach of the US Cyber Games team that will travel to Greece with the top 20 cyber athletes in the nation to compete in the International Cybersecurity Challenge scheduled for June 2022.

"It has been super cool to watch students gain confidence in themselves and to realize that they are strong individuals. They have all the necessary skills; they have a great education; and when they put it to work, they can compete with the best of them."



LOCATION

“Florida Tech stood out from other universities I considered because of its location. First of all, I’m from Bonaire, in the Caribbean, so I wasn’t ready to commit to snowy winters my first time moving away from home! My degree is in oceanography, so being close to the coast was important to me. I love being so close to the beach and able to watch sunrises and full moon rises. Plus, Bonaire doesn’t even have traffic lights, so the small-town feel of Melbourne was so inviting. When I first visited campus, I didn’t feel overwhelmed like I did at larger campuses. I remember thinking,

‘THIS IS IT; THIS IS HOME.’”

—Julia Marisol Martinus,
B.S. oceanography



*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!

PANTHERS ON THE RISE



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

THE RELENTLESS PURSUIT OF GREATNESS.

▶ **Ramone Hemphill Sr.** is part of the just 3% of U.S. aircraft pilots who are Black, but he refuses to stay that way. That is why in December 2020, Ramone and his wife launched the 99th Squadron, a nonprofit organization seeking to expose young people, particularly minorities, to the vast opportunities in the aviation industry and STEM fields beyond.

A project management MBA student with a Private Pilot License and Instrument Rating who works full-time as a systems engineer in avionics at Collins Aerospace, Ramone developed a five-week free ground school course curriculum for teaching middle and high school students

the aviation basics. The course culminates in a flight, during which students have the opportunity to take the yoke.

"The ultimate goal is just to change the narrative among minorities as far as what is truly within reach," Ramone says. "Not only are they capable, but they are needed."

▶ **Rob Himler '14, '15 M.S.,**

is a self-professed storyteller with aviation in his blood. Since he was about 16 years old, manning the brakes alongside his uncle, an aviator paralyzed from the waist down, Rob knew that he would pursue a career in the industry. Today, Rob is the marketing and communications



manager for Melbourne Orlando International Airport, where he has a hand in everything from operations to tourism to hospitality to the aerospace industry.

“Seeing the world from above—just having the controls of flight—is absolutely incredible,” Rob says. “I would tell any student who is chasing a career in aviation, be relentless. Take initiatives. Take advantage of new opportunities because, with those, you’re going to learn; you’re going to gain more experience and, ultimately, take the industry to the next level.”



Katarina Borovina '19 M.S. is a vehicle cybersecurity engineer for Hyundai Kia America Technical Center, where she creates and refines the security requirements and specifications for vehicle systems and exposes vulnerabilities. Over the last decade, hackers have managed to disable fleets, steal private data and financial information, cut brakes and control lights, locks, alarms, horns, sunroofs, wipers and engines while vehicles were in motion by taking over vehicles’ drive systems. Her job is to stop them.

“Unfortunately, in these odd times, it’s hard to tell what life would be like without this field.”

Zach Eichholz '16, '19 M.S., is inspired by the space program’s ability to bring humanity together in pursuit of a common goal. He strives to ignite that same kind of inspiration in the community through his work as deputy community and economic development director and sustainability analyst for the City of Cape Canaveral, Florida, where he oversees the city’s environmental and resiliency initiatives. Zach also recently self-published a book, *The End of the Beginning*, about climate change, sustainability and, essentially, hope. He didn’t wait for graduation to start making a difference in his community, though.

As part of Florida Tech’s Residence Life Sustainability Committee, he helped upstart the school’s first community garden, some of its first bat houses and various energy-efficiency projects on campus and in the surrounding community.

“I love that what I do helps people,” Zach says. “Being at Florida Tech, I was able to get involved with a lot of programs very easily that taught me real-world experience, real-world project management, and allowed me to do things on this campus before going out into the professional world.”

Ryan Gellert '96 MBA, J.D., is quietly and effectively igniting positive change in the world through his role as CEO of Patagonia Works—the holding company composed of apparel company Patagonia Inc., food company Patagonia Provisions and multimedia company Patagonia Media. While these industries may seem varied, Ryan thinks of them as tools to deliver against Patagonia’s mission statement. He sees past the problem to the opportunity: If his company can solve—or at least improve—this supply chain issue, it would be a solution to the climate/ecological crisis through regenerative organic agricultural practices. And finding a solution to that crisis is Patagonia’s primary mission: “save our home planet.”



Photo by Liz Seabrook, Patagonia Images

“We’re super invested in making great clothing for a purpose and with as small as a footprint as we can, but the reality is we’re less of a clothing company than we are a big idea just masquerading as a clothing company,” Ryan says. “We’re just trying to push forward the big idea. Food fits into that; media fits into that; and whatever comes next will have to fit into that.”



Ubaldo Jimenez '21, a professional baseball player from the Dominican Republic signed by the Colorado Rockies fresh out of high school in 2006, was featured in a May 2021 issue of the *New York Times* for making good on a promise he had made to his mother before going pro: to one day, graduate from college. After a successful 12 seasons in the major league, including a no-hitter and a World Series appearance, Ubaldo graduated from the Bisk College of Business with a bachelor’s degree in business administration/management.

“When you get older, you thank your parents,” he said in the article. “In the Dominican, you live and breathe baseball. But not everything is baseball. There’s a life before and after.”

Ashley Lundry '06 was working on her meteorology degree at Florida Tech during the Space Coast’s historic 2004 hurricane season. Since then, the sky has definitely not been her limit. Today, Ashley serves as both a flight director for the National Oceanic and Atmospheric Administration (NOAA) Hurricane Hunters and as a reservist aerial reconnaissance weather officer for the U.S. Air Force Hurricane Hunters. In August 2020, she directed six weather reconnaissance missions

Continued on page 14



Continued from page 13

into Hurricane Laura, the last one only a few hours before the 150 mph storm made landfall on the coast of Louisiana. With a supportive husband, two toddler sons and the thrilling career she's always dreamed of, Ashley is pretty happy where she's at.

"If I could go back and give my college-aged self advice, I wouldn't. I made mistakes and decisions I regretted, but I have learned from those experiences. I think every opportunity I took prepared me for where I am today."

Alyssa Carson, an astrobiology student at Florida Tech, has had her sights set on Mars since she was 3 years old. Since then, she has become the youngest person to graduate from the Advanced Space Academy and the first person to complete all of NASA's seven space camps. She received the applied astronautics certification, officially certifying her to do a suborbital research flight and venture into space. She has given three TEDx Talks and is determined to be the first human to step foot on Mars.

"I chose Florida Tech because one day, I want to be on a mission to Mars. ... It's like everyone here believes in you, which makes you believe in yourself even more. I am so thankful that I get to spend the next few years here, on campus, studying what I love at a university that has welcomed me with open arms," Alyssa says.



Shanita Allen '05 M.S., author of the book series "Let's Go Dreaming," hopes to encourage readers to "reach beyond the stars to pursue their dreams"—a practice that has served her well in life. Shanita is a Board Certified Behavior Analyst with a master's degree in applied behavior analysis from Florida Tech and 17 years of experience serving individuals with developmental disabilities.

"I initially wanted to write one book based on the concept of believing in yourself, following your dreams and teaching children that they have unlimited potential. When they set their minds to achieving their goals, anything is possible. However, one book turned into nine books, and the 'Let's Go Dreaming' series was born," Shanita says.



“IT'S LIKE EVERYONE HERE BELIEVES IN YOU, WHICH MAKES YOU BELIEVE IN YOURSELF EVEN MORE.”

Alyssa Carson, astrobiology student

Dirk Fieberg '01, '03 M.S., and Lee Frey '99, '02 M.S., are co-founders of Arctic Rays, an advanced underwater camera and lighting equipment manufacturing company. Arctic Rays equipment has been used by BBC and OceanX for the making of the documentary series "Blue Planet II," as well as Netflix, the Woods Hole Oceanographic Institute (WHOI), the U.S. Navy, NOAA and several others. The company was created when Dirk, with over a decade of experience working with high-tech lighting for Tempo LED Lighting and Philips Lighting, and Lee, an ocean engineer who has spent 19 years building and piloting underwater vehicles for companies like OceanX, WHOI and Harbor Branch Oceanographic Institution, decided to combine their skills to improve upon the tools available to marine scientists, explorers and documentary filmmakers.

"Our time at Florida Tech gave us both the solid education and lasting friendships that have made this new venture possible," Dirk says.

Sara Torabi '14, '17 M.S., a lifelong singer-songwriter with an interest in international marketing and a desire to bridge the gap between "creatives" and "suits," earned degrees in humanities-prelaw and global strategic communication from Florida Tech. After exciting internships at the ASCAP Foundation and Sony Music Entertainment and completing her second master's degree in May 2020, Sara now works in sync licensing at Downtown Music Publishing (DMP) in New York City. In this role, she pores through DMP's extensive music catalog to make sure the audio asset library is data-accurate and ready for licensing.

"I'm interested in global music markets, what makes them 'tick,' how they market internationally. My global strategic communication degree really equipped me with that marketing and communication knowledge that I needed to advance myself in this area of the music industry."

Casey Hoffman '05, '07 M.S., '10 M.S., has over 15 years of combined spacecraft experience, having worked on the James Webb Space Telescope, space shuttle Discovery, Dream Chaser, the Orion Spacecraft, the Ares I-X rocket programs, Astrobotic—part



"I'M INTERESTED IN GLOBAL MUSIC MARKETS, WHAT MAKES THEM 'TICK,' HOW THEY MARKET INTERNATIONALLY."

Sara Torabi, '14, '17 M.S.



of the NASA Commercial Lunar Payloads program—and the electrical engineering solutions team at Ball Aerospace. Most recently, she became lead lunar electrical engineer at Masten Space Systems, contracted on the NASA Commercial Lunar Payload Services program. In her spare time, she is a race car driver in her Z06 Corvette, having won fourth place at nationals in the SSL class, is a retired professional gamer with two world championship wins under her belt, enjoys building and flying RC helicopters

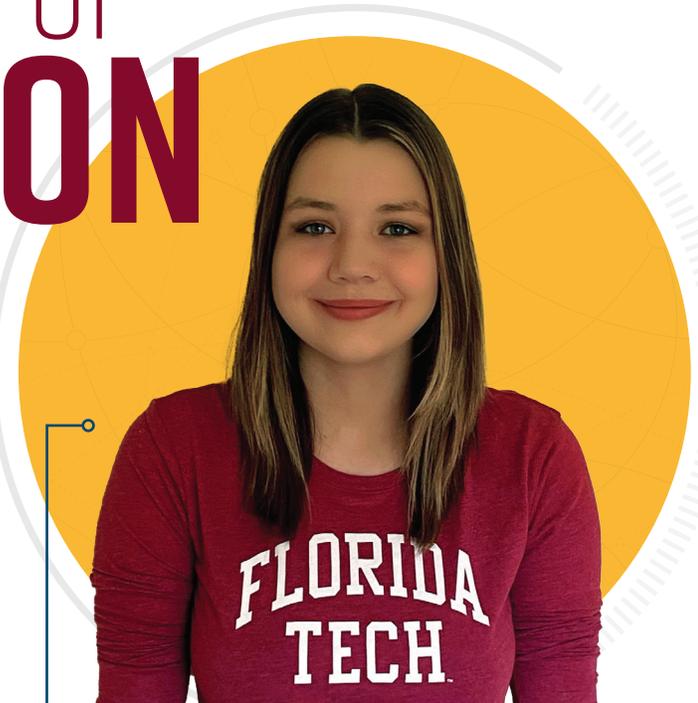
and, occasionally, works on abstract paintings. She has been interested in space since she was a child.

"When I was little, I was watching PBS a lot, and I was watching 'Cosmos,' and something Stephen Hawking talked about was like, if we're going to survive as a species in this giant galaxy of ours, it's like, we have to get off the one little rock we live on." Casey said on local Emmy award-winning PBS39 TV program, "The Future is Female: Women, Space and NASA."

MAKING THE MOST OF ORIENTATION

TOP 5 TIPS FROM A PANTHER PREP LEADER

Hanna Bruggen is a senior in Florida Tech's psychology program who served as a Panther Prep Leader during the fall 2021 Orientation. Panther Prep Leaders (PPLs) are current students who help new students transition into life at Florida Tech, providing advice, mentorship and first-person insight into what you can expect during Orientation, your first year and your entire college career. Having experienced Orientation as both a new student and a team member, Hanna knows Orientation in and out. So, she has prepared a list of her **"Top 5 Tips for Making the Most of Orientation."**



HANNA BRUGGEN

Senior psychology student and Panther Prep Leader offers Orientation advice



1. PLAN AHEAD.

Check out the Orientation schedule online, and plan ahead which events and activities you want to attend, so you won't miss out on a thing.

3. PARTICIPATE.

Orientation Week includes a schedule packed with fun activities and events tailored specifically to incoming students. Movies on the lawn, trivia battles, karaoke night, a silent disco and our infamous "Color Wars" pitting residence halls against each other in a series of friendly competitions are just a few examples of the Orientation fun that awaits. It's interactive. It's fun. And it's your chance to mingle with soon-to-be friends and classmates!



2. DOWNLOAD THE APP. ▶

Available in both the Apple App and Google Play stores, the Florida Tech Mobile app includes an Orientation "persona" with schedules, campus resources, before-you-arrive tips and more that will keep you on track throughout the week. Once Orientation is over, stay up to date on all things Florida Tech by simply changing your persona to "student."



4. KEEP AN OPEN MIND. ▶

Orientation events are designed to help you meet other Panthers. Even if some of the activities seem silly, give them a try! College is all about trying new things, expanding your horizons and stepping out of your comfort zone.

5. ENJOY YOURSELF.

From moving into your dorm to learning to navigate campus, you'll mark a lot of important items off your checklist during Orientation week. But don't forget the most important one: HAVE FUN!

HANDS-ON

“Florida Tech is a small and young university with a diverse student population. As the type of person who enjoys building relationships and who learns best by doing, it is important to me that my professors are

APPROACHABLE AND AVAILABLE.

Since coming to Florida Tech, I have had ample opportunities to get hands on and to engage closely with my teachers both in and out of the classroom.”

—*Brian Dixon,*
B.S. meteorology,
B.S. STEM education





LEARNING OUTSIDE THE CLASSROOM

At Florida Tech, learning is not bounded by a classroom. The education that happens in the “real world” is what gives our students the skills and expertise to practice their theoretical knowledge. That’s why active learning is part of the Florida Tech experience for all students, no matter their field of study. Where might a Florida Tech education take you? ...

TO MARS (KIND OF ...)

Ever wanted to know what it would be like to live on Mars? Students in Florida Tech’s Astrobiological Research and Education Society (ARES) can fill you in.

ARES, a student-run organization that focuses on astrobiological and space science research, has proudly visited the Mars Desert Research Station (MDRS) on multiple occasions. The MDRS, owned and operated by the Mars Society, is a space analog facility in Utah that facilitates professional scientists, engineers and college students in their pursuit of research in human space exploration.

“It is such a unique opportunity. You get to learn a lot about not just science, but about yourself and how you work with others in such an inexperienced environment,” says Ruth Nichols, ARES secretary and recent MDRS health and safety officer. “It’s an incomparable experience.”



INTO THE INDIAN RIVER LAGOON AND THE ATLANTIC OCEAN

From protecting the thousands of species that call the Indian River Lagoon home to using surfboards to better understand how weather systems interact with coastlines, Florida Tech students are at the center of marine and oceanographic research. And for faculty, the skills and knowledge gained from their students actively participating in research are most valued. In the water, on a research vessel or on a surfboard, the lesson is in the doing.

“That kind of experience is going to potentially be more powerful than 100 lectures,” says Dr. Toby Daly-Engel, ocean engineering and marine sciences assistant professor.

ABROAD

Studying abroad with Florida Tech is an experience like no other. Not limited by major or academic level, Florida Tech students have the opportunity to travel and gain international experience, immerse themselves in different cultures, make professional connections and, perhaps, even discover their future homes.

“This is the best learning experience they will ever have because they’re living what they’re learning,” says Heather L. Wautlet, study abroad program director. “Students have gone on to do their master’s and Ph.D.s in places like the Netherlands and Italy, and they realize that there is more to the world than the U.S. and Florida.”

Some previous study abroad destinations: Spain, the United Kingdom, France, New Zealand, Italy, the Galápagos Islands, Peru, Brazil, Ireland, Ecuador, Puerto Rico, China, Australia, Norway, Belgium, Hungary, Africa, Costa Rica, Cuba and more.



INTO THE “REAL WORLD”

Drawing closer to the end of their Florida Tech undergraduate careers, virtually all students complete a hands-on, project-based capstone course before graduation. Produce a documentary or develop a strategic plan for a local business in the School of Arts and Communication; launch a startup in the Bisk College of Business; work with children at The Scott Center for Autism Treatment in the School of Psychology; and so much more.

Perhaps most well-known is the senior design program, through which College of Engineering and Science seniors complete yearlong projects—often working with mentors from major organizations like NASA, L3Harris Technologies Inc., the U.S. Navy, Sun Nuclear, Embraer and many more—and present them to industry professionals (and potential employers!) from across the country at the annual Northrop Grumman Engineering and Science Student Design Showcase.

“We bridge the gap—we get the theoretical knowledge from the classroom, and then we merge that with the ability to build, construct, design and test, which prepares them for pretty much every challenge out there,” says Juan Avendano Arbelaez, director of the Center for Advanced Manufacturing and Innovative Design.



ACROSS THE GLOBE

The X-Culture project is an important component of the International Business course.

Over eight weeks, Florida Tech students work on global virtual teams with students from various foreign universities. In 2021, over 5,000 students from 120 universities participated, assisting companies in figuring out how to expand their brands and services outside of the U.S. or their home base to an international audience.

“They’ve got time zone differences, interpersonal differences, and they have to find a way to come together over that eight-week period to produce a report. ... This is as close to real life as we can get,” says Tim Muth, Nathan M. Bisk College of Business instructor and X-Culture facilitator. “Rather than me talking about the challenges of dealing internationally, they are experiencing it right now.”

INTERNSHIPS FOR THE IN-DEMAND

If there's one thing Florida Tech students have in common, it's big ambition. They don't just hope to get a good education and a secure job; they strive to get the best education and as much experience as possible to achieve the career of their dreams.

In addition to our unique degree programs and hands-on learning focus, Florida Tech empowers students to achieve these lofty goals by connecting them with major organizations and potential future employers—often, through internships.



LAUREN-ANN GRAHAM '20

Lauren-Ann earned a bachelor's degree in aerospace engineering and is now pursuing a master's degree in mechanical engineering, both at Florida Tech. One of her longtime dreams became a reality when she got an internship at NASA's Kennedy Space Center.

"As a NASA intern, I have had the amazing opportunity of working with the Microgravity Simulation Support Facility (MSSF) at the Kennedy Space Center. The goal of my project has been to support research as it pertains to the effects of microgravity on biological organisms. Being an

aerospace/mechanical engineer, I've had the opportunity to assist the MSSF team with hardware analysis. Florida Tech truly set me up for success in receiving and performing this internship position. My first internship with Larsen Motorsports, a Florida Tech partner, provided me so many opportunities that truly made me stand out when applying. I also learned critical engineering skills in my classes and labs that I've used on a daily basis during my internship. I am so grateful for the incredible networking and learning opportunities Florida Tech has provided me with," she says.

WHITNEY ELLIS

Whitney is an electrical engineering student who was offered a manufacturing electrical internship at General Motors Co. before she reached her junior year. She credits Career Services and the hands-on experience she received since the beginning of her Florida Tech education for enabling her to get such a prestigious internship so early in her college career.



"Thanks to Career Services urging me to use Handshake, its job resource database, I was contacted by a recruiter to apply for two separate positions. I did so and was granted an interview. Career Services then prepared me for both behavioral and skill-set questions that were asked in all stages of the interview process. It also helped me realize the classes I took as a freshman gave me valuable experience and helped me draw out those experiences—from freshman year all the way back to high school—to create an impressive résumé. I advise every student, during or after their freshman year, to apply to as many internships as possible. The opportunities are endless if you have the courage to go after what you want," she says.



BEN KOMITA

Ben is an ocean engineering student pursuing a career in coastal engineering. He credits the encouragement he received from upperclassmen at Florida Tech for helping him get an internship as a coastal engineering technician with ACT Engineers.

"My role was to work with clients along the coast of New Jersey to propose, design and consult on projects, such as living shorelines, bathymetric surveying, dredge volume design and marine ecological surveying. Florida Tech helped me get this internship by fostering a community that promotes students helping other students. As a freshman, some ocean engineering upperclassmen encouraged me to reach out to companies I was interested in and be an advocate for myself. Additionally, my work with Dr. [Robert] Weaver in the Coastal Engineering Lab and Dr. [Stephen] Wood in the Underwater Robotics Lab gave me valuable project experience that set me apart as an applicant. Florida Tech does an excellent job of getting students involved with major-specific classes and hands-on work early in their college career. My advice for students seeking internship opportunities is exactly the advice that was given to me: Be an advocate for yourself. This means reaching out to companies that may not have an advertised internship, following up and showing what you can offer," he says.

JORDAN FORMAN

Jordan is an astronomy and astrophysics student working toward becoming a NASA astronaut. Jordan took "one giant leap" closer to that goal when she got an internship at NASA's Goddard Space Flight Center.

"Florida Tech definitely played a role in opening the doors for this internship. One member of the faculty, Dr. Saida Caballero-Nieves, has been a great mentor for me and encouraged me to attend a virtual National Society of Black Physicists Conference. This conference is where I met one of the astrophysicists from Goddard that I ended up working with at my internship. I was able to connect with this scientist because I am very passionate about her research and had a bit of experience with it from working with Dr. Eric Perlman and Dr. Evan Smith,



both faculty members at Florida Tech. My advice for Florida Tech students seeking internship opportunities is to not be afraid to reach out to people. Don't be afraid to put yourself out there and reach out to those who may be doing research that you are interested in, or those who have the career that you are interested in," she says.



MAMOON SYED '21

Thanks to a reference from Florida Tech Career Services, aerospace engineering student Mamoon got his foot in the door at Blue Origin, where he spent a summer as an Advanced Developments Program intern.

"As an intern at Blue Origin, my job was to aid in the development and analysis of systems that are being developed as baseline reference designs for future missions. My professors at Florida Tech helped prepare me for this experience because they were always willing to take a chance on me. I worked on many projects where a professor would've been well within their rights to say I didn't have the necessary experience and to come back when I did. But they never did, and because of that, I'm a better engineer. My advice to students seeking internship opportunities would be to jump at any opportunity that you find interesting. The point of going to school is to learn—it's OK if you don't know everything yet," he says.



1

I. SHARK WEEK

In July 2021, assistant professor and shark biologist Dr. Toby Daly-Engel, made two appearances during Discovery Channel's ever-popular "Shark Week" extravaganza. Daly-Engel heads Florida Tech's Shark Conservation Lab and researches shark mating systems and habitat use as well as the impacts of climate change on shark populations. She discusses these topics in "MotherSharker" and joins actress, comedian and author Tiffany Haddish for a swim with sharks on "Tiffany Haddish Does Shark Week," both streaming now on Discovery+.

2. FUTURE PROFESSIONALS

Throughout the year, students preparing for the "real world" attend various virtual networking, career education and elective events through the Future Professionals Certificate Program. By attending a certain number of events, like mock interviews, alumni career panels, résumé critiques and community service experiences, students not only earn a certificate sure to impress future employers but also develop soft skills that make them both more hireable and successful after graduation.

3. GAME NIGHT, SCUBA STYLE

In November 2021, Florida Tech Scuba club hosted an underwater game night in Brownlie Hall pool. From watermelon basketball to underwater Uno, club members had a blast playing around in the pool, all while practicing their scuba skills.

4. FREE SPEECH WEEK

Free speech. Free press. Free cookies. Now those are some things we can get behind, and each spring, we do! Hosted by Florida Tech and its student-run newspaper, *The Crimson*, Free Speech Week features a series of lectures and activities centered on and designed to foster a better understanding of the First Amendment. In light of the global pandemic, the 2021 event focused on the value of quality science journalism and featured two virtual events: a keynote address from Joe Palca, a science correspondent for National Public Radio, and a science journalism panel including Dr. James Brenner, associate professor of biomedical and chemical engineering; *Florida Today* environmental reporter Jim Waymer; and Adam Lowenstein, director of media communications at Florida Tech.

THE SCENE



5. 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.

6. BUILDING FOR BIOMED

As the biomedical field booms, Florida Tech is making room on campus to train the next generation of industry experts, complete with cutting-edge

resources and equipment. The 61,000-square-foot Gordon L. Nelson Health Sciences building will double the size of Florida Tech's undergraduate biomedical engineering program, will increase the size of the undergraduate premedical program, provides more than 20,000 square feet of classroom and training spaces and allows students access to teaching laboratories that use augmented and virtual reality tools and space for orthopedics, tissue studies and advanced computational simulations.

7. INTERNATIONAL FEST

At Florida Tech, taking a trip around the globe is a lot easier than it sounds. In fact, you don't even need to leave campus! Each spring semester, Florida Tech's International Festival takes over Panther Plaza for a celebration of cultural diversity and community. During the event, student groups and local cultural organizations host

country- and diversity-themed display booths, showcasing a variety of traditional clothing, informational literature, maps, flags and artifacts while dance and vocal groups, bands and other performers provide live entertainment on the Pantherium's outdoor stage and attendees feast on a variety of delicious ethnic foods.

8. GREAT FLORIDA AIR SHOW

In May 2021, we showcased what Florida Tech is all about at the Great Florida Air Show! A joint effort with Larsen Motorsports, the College of Aeronautics, the Melbourne Orlando International Airport, Northrop Grumman Corp. and the Air Show Network, we hosted everyone from local high school students to the U.S. Navy Blue Angels pilots, and the Florida Tech STEM Zone showcased airplanes, drones, jet dragsters, jet engines, student design projects and so much more for attendees to explore and learn.

Continued on page 24

9. MARZ KETCHUP

Remember those potatoes Matt Damon's character in "The Martian" worked so hard to grow while trying to survive on Mars? A Florida Tech astrobiologist, in concert with a global food company, has developed the perfect accompaniment: Heinz Tomato Ketchup, Marz Edition.

The end result of a two-year collaboration with Heinz (thus the "z" in Marz) and associate professor Dr. Andrew Palmer, this unique prototype condiment is more than a novelty. With one paper submitted for peer review and others to come, it represents the results of one of the largest and longest explorations of the challenges and opportunities for food production on the red planet—and closer to home. Palmer and a team of more than a dozen students, scientists and technicians worked in an on-campus greenhouse, known as the Red House, designed to replicate conditions humans would face when farming on Mars, starting with powerful LED lighting—the only light the tomato plants ever experienced—and utilizing about 7,800 pounds of analog Martian regolith—soil from the Mohave Desert that mimics many of the characteristics of actual Martian soil.

10. SETTING RECORDS

Florida Tech women's rowing made history twice at the 2021 Sunshine State Conference Rowing Championship in April 2021 when the program became the first in the

SSC to win four straight conference titles, which also brought to nine the team's total number of conference championships. Both are records. The women tallied a first-place finish in the V8 and a second-place nod in the V4, which was good for first place overall.

11. 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-square-foot Clemente Center for Sports and Recreation, which includes varsity and intramural gyms, a fitness center with state-of-the-art equipment, various multipurpose and aerobics rooms, a Starbucks and a café, is always bustling.

12. ROCKETS TO RACE CARS

Larsen Motorsports (LMS) is home of the Florida Tech jet dragster—yes, we've got a jet dragster—and several student interns annually. LMS and its nonprofit, Blazing Trails, have partnered with NASA HUNCH (High School Students United with NASA to Create Hardware) and Rockets to Race Cars, NASA educational programs focused on teaching students of all ages the STEAM behind rocket and jet engines, spacesuits, fire suits and various equipment found in both rockets and race

cars. Blazing Trails hosts both virtual and in-person presentations that also give students a glimpse at what educational paths can lead to careers in the industries.

13. MERTENS MARINE CENTER

In fall 2021, Florida Tech began construction on the Mertens Marine Center, a waterfront facility at the mouth of Crane Creek on Melbourne Harbor where undergraduate students will work alongside professors and graduate students conducting experiments, testing equipment and more—right on the water. Named after Florida Tech's first marine biology instructor and a major university supporter, the building will assist researchers in their Indian River Lagoon improvement efforts and provide a premier educational experience for students as they get hands-on experience with the lagoon.

14. BIG DAY OF SERVICE

In October 2021, the campus community partnered with United Way of Brevard for Florida Tech's second annual Big Day of Service. Students, faculty, staff and more gathered on Panther Plaza to package more than 5,000 hygiene kits for the Brevard County homeless community.

15. ELECTRIC PLANE

In August 2021, Florida Tech became the first and only American university to own and fly an electric plane. Florida Tech alumnus and former

associate dean **Isaac Silver '06, '13 Ph.D.**, was the pilot for the inaugural flight, flying for 22 minutes, using about a third of the aircraft's battery capacity and creating an operating cost of only \$103. The plane gives students opportunities for experiential research with this cutting-edge technology.

16. IN-PERSON COMMENCEMENT

After a year and a half of virtual commencement ceremonies due to the COVID-19 pandemic, Florida Tech was thrilled to host its first in-person ceremony for summer 2021 graduates in August. While adhering to safety precautions like mandatory masks for all attendees and the elimination of handshakes upon graduates receiving their diplomas, hundreds of students crossed the stage in the Charles and Ruth Clemente Center and the university conferred 702 degrees to students from 35 countries and 37 U.S. states.

17. GREEK WEEK

A weeklong celebration for all of the social fraternities and sororities on campus, Greek Week is a chance for members to come together to celebrate the spirit and pride of being a part of a fraternity/sorority. All events are open to the whole campus community, and Greek Life uses the time to showcase its passion for scholarship, service, leadership and brotherhood/sisterhood.





FLIGHT

“Ultimately, I chose Florida Tech for its outstanding aviation program. Flying can be a risky business, and as a brand new freshman, I was nervous at first. But after my first week of lessons,

I WAS HOOKED!

With its high level of professionalism and unmatched safety culture paired with the knowledgeable, welcoming instructors at F.I.T. Aviation, Florida Tech has exceeded my expectations.”

—Paige Rieger, A.A.
air traffic control,
B.S. aeronautical
science—flight

ELECTIVES

OUTSIDE THE BOX

Whether it covers a topic related to your major, an unrelated but complementary field or a subject you've just always found interesting, picking a good elective is one way to really get the most out of your college education. Florida Tech offers hundreds of electives across all disciplines for you to choose from, but here are a few you may find unique, interesting and perhaps even fun!

ANALYZE FICTION & FILM

Crime in Fiction
Monsters in Fiction
Narrative Film
Science Fiction Literature and Film
Serial Killers in Fiction
Television and Popular Culture

PLAY MUSIC

Chamber Music Ensemble
Concert Band
Concert Choir
Jazz Ensemble
String Orchestra

DIG INTO MUSICAL ROOTS

Fundamentals of Music
Intro to World Music Culture
Jazz and African American Experience
Masterworks of Music
Music Theory and Ear Training
Music in Video Games
Popular Music and Culture

COMMUNICATE DIFFERENTLY

Creative Writing
Media Production—Audio or Video
Photography
Scriptwriting

SPEAK ANOTHER LANGUAGE

Chinese French
German Italian
Japanese Spanish

UNDERSTAND UNIQUE MINDSETS

Abnormal Psychology
Animal Learning and Behavior
Culture and Psychology
Drugs, Crime and Society
Introduction to Global and Multicultural Awareness
Psychology of
 Learning and Motivation
 Disasters Personality
 Leadership Women
 & More!

SPREADING SUSTAINABILITY

6 WAYS FLORIDA TECH IS LEADING THE WAY FOR A MORE SUSTAINABLE FUTURE

Our sustainability courses and degree programs are top-notch, but at Florida Tech, “sustainability” goes beyond academics. Sustainability initiatives and practices have become core components of who we are.

“Sustainability issues involve almost everything,” says Dr. Ken Lindeman, co-chair of the University Sustainability Council (USC) and professor of ocean engineering and marine sciences.

How so? Here are six major ways Florida Tech is leading the way for a more sustainable future.

I. UNIVERSITY ORGANIZATION

Coordination and involvement of the whole Florida Tech community is a vital part of sustainability action. The USC, for example, is charged with compiling detailed data submissions to green accreditors, liaising with outside and on-campus organizations and spearheading many other sustainability efforts. Composed of more than 40 members, including 13 students representing diverse student organizations, the USC ensures broad coordination on sustainable initiatives campuswide.

2. COMMUNITY INVOLVEMENT

Many years of student senior sustainability research projects for the Northrop Grumman Engineering and Science Student Design Showcase have helped build first-ever sustainability plans for five local cities, including the largest city in the county, Palm Bay. Subsequent senior research students have then implemented diverse sustainability initiatives on the ground in these cities. Over 15 students from many campus majors have engaged in these unique campus-community partnerships.



“Twelve years ago, Florida Tech’s leadership saw an opportunity to fill new education needs for the transdisciplinary challenges of the 21st century. Since then, we have relentlessly built some of the few STEM-based sustainability major and minor programs in the southern U.S. We look forward to the next steps on this journey.”

—Dr. Ken Lindeman

3. ABUNDANT AWARDS

Through its sustainability initiatives, Florida Tech has attained some remarkable accomplishments. Accolades like these speak for themselves!

AASHE SILVER STARS RATING

One of only five universities in Florida with this prestigious campuswide award



PRINCETON REVIEW GUIDE TO GREEN COLLEGES

Ranked in the top 20% of green universities in the country



LEED BUILDING CERTIFICATION

Home to two LEED-certified green buildings



BRONZE-LEVEL BICYCLE FRIENDLY UNIVERSITY

For safe and accessible bicycling practices on campus



SIERRA CLUB COOL SCHOOLS RANKING

Recognized for energy-efficiency actions



4. IMPRESSIVE INFRASTRUCTURE

From sustainable building design to building updates with modern, energy-efficient heating systems, LED lighting, automated controls and more, the facilities operations department plays a huge role in maintaining a sustainable campus.

“Facilities at Florida Tech is utilizing proven sustainable approaches that limit or reduce our impact on the environment because we know it is important to the campus community—and beyond,” says Kirk Hemphill, director of maintenance.

FLORIDA TECH AQUATIC CENTER

In 2015, the Florida Tech Aquatic Center received a LEED Silver certification. Thanks to student senior sustainability research projects alongside the facilities operations department, the complex became one of the few green-certified pools in the state.

THE SCOTT CENTER FOR AUTISM TREATMENT

Also the result of a partnership between student research teams and facilities operations, The Scott Center for Autism Treatment was Florida Tech's first building formally built to LEED certification specifications.

FOLLIARD ALUMNI CENTER

Currently in the application process for LEED certification, the new, state-of-the-art Folliard Alumni Center is a net-zero energy structure and serves as a model for a cost-effective, solar-powered commercial office building design for a Florida climate.

PANTHER DINING HALL

Panther Dining Hall has various vegan offerings and uses state-of-the-art systems to reduce waste, recycle water and sanitize dishes for reuse in the dining room. The adjacent grocery store also has a variety of organic offerings.

5. A+ ACADEMICS

SUSTAINABILITY STUDIES B.S.

The sustainability studies major program expands on Florida Tech's science and technology strengths in combination with customized business and social science courses to satisfy industry, government and nonprofit needs for graduates who can operate across multiple disciplines.

“This is entrepreneurial, STEM-based sustainability, since many sustainability programs are not science- and tech-based. Yet, majors also take a minimum of five business courses,” Lindeman says.

SUSTAINABILITY MINOR

Open to undergraduate students in any Florida Tech program, sustainability minor students are required to conduct a capstone research project.

“Over the past 12 years, more than 160 students have graduated with either a minor or bachelor's degree in sustainability at Florida Tech. Those minor students represent over 30 undergraduate programs from all colleges on campus,” Lindeman says.

COMMUNICATING SUSTAINABILITY COURSE

Students in this new School of Arts and Communication special topics course produce a documentary and related media materials highlighting sustainability initiatives. The course teaches applied communication strategies and tactics and how to apply them in the context of sustainability narratives.

6. STUDENT ORGANIZATIONS

An integral part of Florida Tech's sustainability efforts are the student organizations that focus on sustainability education through events and practical hands-on activities. Some of these include:

STUDENT ORGANIZATION FOR SUSTAINABILITY ACTION (SOSA)

One of the older campus sustainability clubs, SOSA conducts projects and events on and off campus to advance sustainability initiatives. Projects include spring and fall Earth Week events and other activities with many campus and community partners.

RESIDENCE LIFE SUSTAINABILITY COMMITTEE

Composed of residence hall advisors and directors from all campus housing areas,

this committee manages the Leave Green program, which recycles materials during the end-of-year move-out, as well as other important campus energy and recycling projects.

ETHOS COMMUNITY GARDEN

This student-run community garden teaches members how to grow plants—from native flowers to eggplant trees and everything in between—and about sustainable growing practices.



#THANKSFLORIDATECH

RECENT GRADS GET JOBS BEFORE DIPLOMAS

At Florida Tech, we know that most people go to college with just one goal in mind:

GET A JOB.

So, we help students do just that—oftentimes, before they even graduate.

Just ask some of our recent graduates who had full-time job offers secured before commencement and credit their Florida Tech experiences for the boost.

COLLEGE MAY BE ONLY FOUR YEARS, BUT A FLORIDA TECH EDUCATION IS AN INVESTMENT THAT WILL PAY OFF FOR A LIFETIME.

MEET SAM

Sam Hartle '21 earned a bachelor's degree in computer science with a cyber operations concentration and a computational mathematics minor and began working as a cyber reverse engineer with ICR Inc. later that month. He interned with ICR the previous summer after having learned about the opportunity through Handshake, Florida Tech's job and internship resource database for students.

"At the end of the internship, one of my mentors told me that the main reason they decided to extend a full-time offer to me was because of my ability to take a vague description of a problem, break it down into one or more simpler problems and come up with an effective solution. I feel I developed this skill by being curious in assignments and projects both in and out of the classroom during my time at Florida Tech."

Sam's story isn't unique. Our co-op and internship programs connect students with major employers and industry leaders, frequently resulting in full-time job offers before they graduate.

MEET ETHAN

Ethan Kennedy '21 started his new job at Raytheon Technologies upon graduation, after years as an intern there. Throughout that time, Ethan took what he learned in the classroom and lab and applied it to his internships—a practice, he says, is what persuaded the company to extend the job offer.

"Showing initiative, curiosity and enthusiasm for every project I worked on at Raytheon while also coming up with ideas and proposals that would benefit the company sealed the deal on the organization wanting to hire me. All of these skills I learned from watching the daily example set by the chemical engineering staff at Florida Tech."

MEET STEPHEN

For **Stephen Chang '21**, the next chapter includes exploring the field of dredging and marine construction while working as an engineer on Manson Construction Co.'s Gulf & East Coast Dredging Team to help

build the nation's waterways and marine infrastructure.

"For a small school, Florida Tech had a huge impact on my life and did a great job in helping reach my potential. Between joining Greek Life, Student Government and doing research with my department, possibilities were limitless."

MEET MUHAMMAD

Muhammad Khan '21 received a job offer due to proactive outreach. After he applied for a thermal engineer position at Concept Group LLC, he started reaching out to current employees via LinkedIn to learn about their experiences with the company. This, he believes, is what got him the interview that ultimately led to his hiring.

"I knew that all the experience I have gained at Florida Tech, plus my internships, would help me stand out. I have worked hard in the last four years to reach this point. I am really happy to start my career, and I know Florida Tech has already given me a strong base/foundation, which will definitely be helpful in my future endeavors."

MEET HALEY

As a student-athlete and graduating senior, **Haley Gilmour '21** had a lot to juggle in her final semester. So, she couldn't have been happier to strike "Get a job" from her to-do list.

"Florida Tech has introduced me to some of the best people in my life: roommates, teammates, classmates, advisors, professors—all of whom have helped me get to where I am now. It's a huge relief to already have received and accepted a job offer. As a senior, I already have so many things on my plate; it's hard to imagine I could add anything else to it all.

"While I'm excited to enter the job force, become a 'real adult' and start the next chapter of my life, I'm a bit sad to be closing this chapter so soon. I have loved my time at Florida Tech and would've loved to have a little more time here."



SAM HARTLE '21



ETHAN KENNEDY '21



STEPHEN CHANG '21



MUHAMMAD KHAN '21



HALEY GILMOUR '21

DIGITAL TWINNING

Florida Tech is at the forefront of a new revolution in modeling, simulation, virtual reality and digital twins of products, processes and systems. University researchers are building new capabilities that are enabling the integration of intelligence systems for monitoring and control over digital twin technologies for multiple domains and applications, including digital manufacturing, cybersecurity, IoT and propulsion systems.

Using Siemens NX software, researchers have built digital twins of the City of Palm Bay, as well as Florida Tech's campus, seen here. The campus digital twin is integrated with our control and academic systems that provide a conversational interface for people to query, and eventually control, operations on campus.

"When we engage in this activity and we engage in this type of research, we're actually bringing

our students to a whole new set of tools and education opportunities that will be in time for the industry that is coming in the next few years," says Dr. Marco Carvalho, executive vice president and chief operating officer, provost. "We are ahead of the curve on that, and we are preparing both our students, our faculty and our researchers to make a difference in that space."



SCAN HERE TO LEARN MORE AND SEE THE FLORIDA TECH CAMPUS DIGITAL TWIN IN ACTION!



RESEARCH

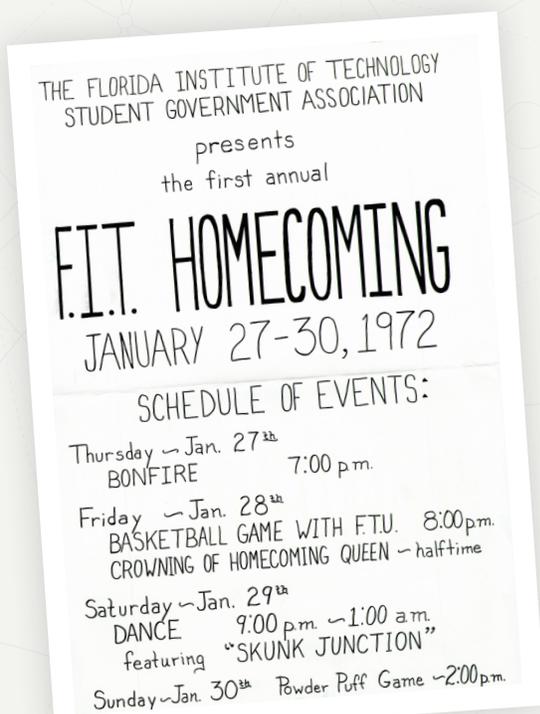
“Independent research is an experience that is given to very few undergraduate students at any other university, but at Florida Tech, we experience research from the driver’s seat. In my junior year, I was assigned an independent research project about which I am now writing a research paper as first author. Having my first publication come from undergraduate work bodes incredibly well for my future aspirations of completing a Ph.D. and becoming an expert in cancer immunotherapies. It has all required a lot of hard work and dedication. But I have had unbelievable support from the university and my professors.”

—Sarah Ali, B.S.
biomedical engineering



HOMECOMING THROUGH THE DECADES

Homecoming is an important tradition at Florida Tech, both for alumni returning “home” to see old familiar faces and places and for current students getting a glimpse at how rich their futures can be. The people, places and traditions may have changed throughout the years, but a look at Homecomings past reveals one constant: pure, steady Panther Pride.



SPRING 1972

FLORIDA TECH'S FIRST HOMECOMING

Homecoming festivities originally coincided with National Science and Engineering Week and featured basketball as the big-picture sports attraction.

Schedule highlights included a powder-puff football game, alumni cocktail party, bonfire and THREE dances: a get-acquainted dance, a casual dance plus the Homecoming queen's coronation and a formal ball.

1973

"THE GREAT MYSTERY CONTEST"

Student government planned a contest during which an F.I.T. Aviation plane would drop numbered pingpong balls over a field for students to collect, and the person to get the lowest number would win a prize: an eight-track stereo. Following a series of unfortunate incidents, the plane flew over the crowd at barely treetop height and released the balls a bit too late, resulting in their landing in a nearby neighborhood whose panicked residents mistook the noise and herds of students as a riot. Chaos ensued, but it was a Homecoming that students—particularly Ron Hix, who won the eight-track player with No. 11!—will never forget.





LATE '70s-EARLY '80s

ANNUAL RAFT RACE

Students built and raced their own vessels down a 1.8-mile stretch of Crane Creek. Floats were made of everything from barrels tied together with rope to empty milk cartons and fiberboard. Depending on the quality of the rafters' engineering, it was either a pleasant float downstream or a very damp, very long struggle.



1980

"GONE WITH THE WIND"

Events included a "Burning of Atlanta" bonfire, a "Wounded Soldier" blood drive, an 8-mile "Sherman's March to the Sea" walkathon for muscular dystrophy and a "river battle" raft race between vaunted Civil War ironclad battleships, the Monitor and the Merrimack.



1995

ALUMNI AWARDS

The Office of Alumni Affairs started giving out alumni awards during Homecoming week. It wasn't until 2011, however, that the office introduced the Jerome P. Keuper Distinguished Alumni Award and began hosting the formal Homecoming Awards Gala as it is known today.

2004

HOMECOMING DANCE

Event organizers hosted the first Annual Homecoming Dance at the Clemente Center. The dance moved to the old County Line Saloon in Melbourne in 2014, the event's last year before getting bumped for the Homecoming Awards Gala.



2011-2012

MODERN-DAY HOMECOMING EVENTS

Alumni Affairs hosted the first Homecoming 5K Run/Walk (2011) and Homecoming Fest (2012) free concert in Downtown Melbourne as we know them today. The inaugural Homecoming Fest headliner: The Mighty Mighty BossToneS.

1979

"WESTERN WEEK AT GOLD RUN GULCH"

Cowboy hats were standard attire for the week, which also featured a full schedule of themed events including three nights of John Wayne movies, a square dance, saloon night, a hayride, naming of the "town's mayor and sheriff" instead of king and queen and a bean-eating contest. Yes, a bean-eating contest: like a pie-eating contest, but decidedly sloppier and more disgusting.



2006

THE YEAR OF TWO HOMECOMINGS

With the decision to move Homecoming festivities from spring to fall semester, students enjoyed a double dose of celebration this year. After "Surf the Stars" in spring came "Rock the World," complete with pop star impersonators from throughout the decades plus an "Alumni & Friends" golf tournament.



2019

PANTHER PUB PROWL

In addition to the traditional events, the alumni office hosted a Panther Pub Prowl during which participants could take advantage of Homecoming drink specials and snap photos with Pete at local alumni-owned establishments to win a prize.

2020-2022

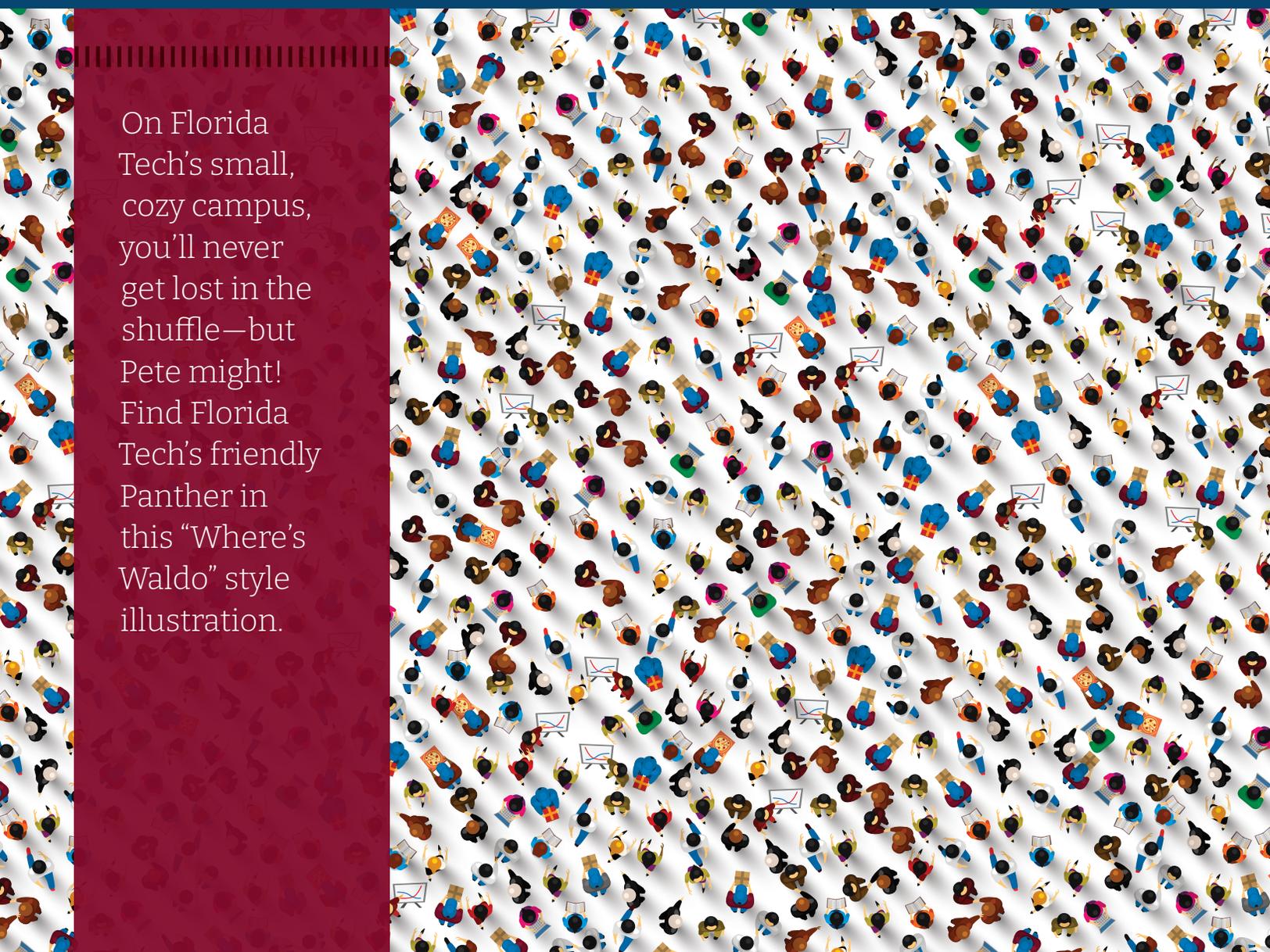
PANDEMIC BREAK

Due to the COVID-19 pandemic, Homecoming festivities have been on hold for three years to ensure the health and safety of our students, alumni and entire campus community.



**Office of Undergraduate
Admission**

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



On Florida
Tech's small,
cozy campus,
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get lost in the
shuffle—but
Pete might!
Find Florida
Tech's friendly
Panther in
this "Where's
Waldo" style
illustration.