FLORIDA ATLANTIC

ENGINEER

2026

ENGINEER THE FUTURE.

COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

Dean's **Message**

Engineering What Comes Next

Engineering and computer science are no longer defined by individual disciplines—they are defined by the problems they solve.

At the FAU College of Engineering and Computer Science, we are intentionally building a college that operates at this intersection: where artificial intelligence meets autonomy, where sustainability is powered by data and intelligent systems, where health is advanced through engineering innovation, and where students learn not just to adapt to the future—but to shape it.

This magazine captures a pivotal moment for our College.

Over the past several years, FAU Engineering and Computer Science has evolved into a highly interconnected ecosystem of research centers, faculty expertise, industry partnerships, and student opportunity. Our research portfolio spans networked AI and connected robotics across air, space, land, and sea; coastal and ocean engineering critical to Florida's future; neuroengineering and SMART health solutions that place people at the center of technology; intelligent infrastructure, energy, and transportation systems; and emerging investments in quantum computing and devices. These are not isolated efforts—they are part of a deliberate strategy to align discovery with real-world impact.

Equally important, our research does not stop at the laboratory door. Through community-embedded innovation—from smart streetscapes and environmental sensing to watershed and resilience projects—our College works hand-in-hand with municipalities, industry partners, and regional stakeholders to deploy solutions where they matter most. FAU's location is not just an advantage; it is a living laboratory.

At the heart of everything we do are our students.

From engineering design on day one to hands-on fabrication, global projects, internships, hackathons, and industry engagement, we are committed to preparing graduates who are technically excellent, adaptable, and ready to lead. Our students leave FAU not only with degrees, but with experience, confidence, and a sense of purpose.

This magazine reflects more than a snapshot—it represents a statement of direction.

It reflects a College that is growing with intention, investing strategically, and embracing interdisciplinary collaboration as a core strength. It reflects faculty who are pushing boundaries, students who are building solutions, and partners who believe in FAU as a catalyst for innovation and economic impact.

As you explore these pages, I invite you to see FAU College of Engineering and Computer Science not only as it is today, but as what it is becoming: a college defined by ambition, connected by collaboration, and driven by impact.

Welcome to the College of Engineering and Computer Science at Florida Atlantic University.

Stella Batalama

Stella Batalama, Ph.D.
Dean, College of Engineering and Computer Science
Florida Atlantic University

HIGHLIGHTS

CONTENTS

BEST COLLEGES
U.S.News & WORLD REPORT
COMPUTER SCIENCE
2026

Engineering Research and **Innovation**

Recent Highlights

FAU Leads in Next-Generation Quantum Computing

Florida Atlantic University is the first in Florida to host a dedicated, on-campus quantum computer powered by a D-Wave Advantage2 system. With a $20 million investment, the initiative expands access to quantum hardware—supporting research, education, and industry collaboration in next-generation computing and emerging quantum technologies.

U.S. Air Force Jayhawk Flight Simulator

An in-kind U.S. Air Force award to the Center for Connected Autonomy and AI (CA-AI) brings a $4.5 million T-1A Jayhawk mixed-reality, motion-enabled flight simulator to FAU, expanding research in autonomy, aerospace systems, and human–machine interaction. The platform enables high-fidelity, safe testing of complex and high-risk scenarios—supporting advancements in AI, sensor fusion, and autonomous systems.

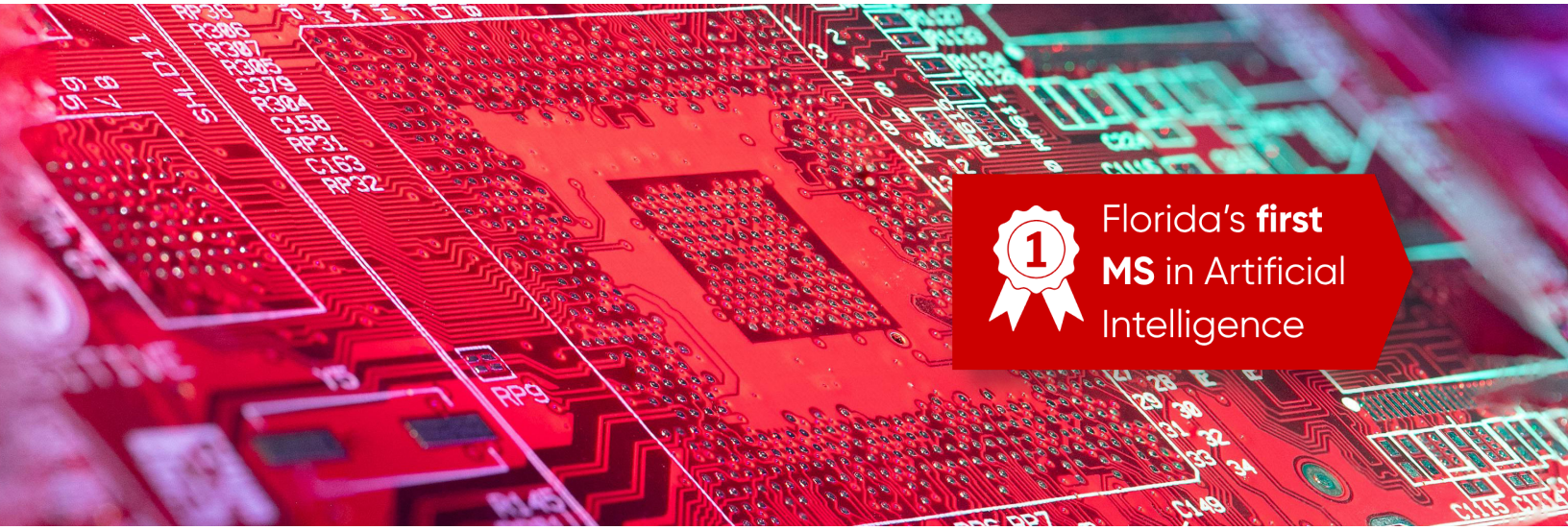
Ubicquia Innovation Center Advances Intelligent Infrastructure

Backed by a $1.5 million philanthropic investment, the Ubicquia Innovation Center for Intelligent Infrastructure (UICII) advances AI-enabled sensing, real-time analytics, and connected systems that digitize and monitor critical infrastructure across utilities and urban environments. Through collaboration with industry and municipal partners, the center supports real-world deployment of technologies that improve grid resiliency, energy efficiency, and public safety.

Federal Funding Advances Engineering Innovation

Florida Atlantic University secured $4 million in federal funding, with $3 million supporting the College of Engineering and Computer Science. This includes a $2 million award from the U.S. Department of Defense and the U.S. Air Force for AI-enabled autonomous systems, as well as $1 million to advance chip design infrastructure and accelerate workforce development across Florida.

AI and Autonomy



Leading the Future of Intelligent Systems

Artificial intelligence and autonomy are driving the next generation of systems designed to operate across land, air, and sea. Our research focuses on AI-enabled technologies—from autonomous robotics to resilient communications networks—that sense, adapt, and perform in mission-critical conditions. This work spans research, education, and deployment, shaping how intelligent systems are engineered and applied.

Where AI Advances National Defense

Through the Center for Connected Autonomy and Artificial Intelligence (CA-AI), research focuses on networked AI and connected robotics that support secure, intelligent defense and mission-critical systems. Supported by federal and industry partners, efforts include software-programmable wireless networks designed to enable resilient autonomous operation in contested environments.

From Research to Deployment

This work translates foundational research into operational systems. From autonomous robotics to next-generation communications, these technologies are engineered for deployment across defense, industry, and emerging infrastructure.

CA-AI MAKES AI SMARTER

Researchers in the Center for Connected Autonomy and Artificial Intelligence (CA-AI) are advancing how AI systems learn—starting with the data itself. Their work focuses on identifying and removing hidden errors in training datasets before models are built, ensuring AI systems operate with greater accuracy and reliability.

Using a novel mathematical approach, the team automatically detects mislabeled or inconsistent data points that can significantly impact performance in high-stakes applications. By improving data quality at the source, this work reinforces the foundation of intelligent systems and supports more reliable outcomes in applied settings. This work has been supported by the Air Force Office of Scientific Research (AFOSR).

RESEARCHERS IN ACTION

Dimitris Pados, Ph.D.
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Networked AI, Connected Robotics and Programmable Wireless Networks

Dr. Pados lleads research in next-generation communication architectures that support autonomous and AI-enabled platforms. His work focuses on software-programmable wireless networks that dynamically adapt to changing conditions, enabling secure and resilient information exchange across distributed systems. By integrating machine learning with network design, these systems optimize performance, spectrum use, and reliability in constrained and contested scenarios, with applications spanning defense, national security, and advanced communications infrastructure.

George Sklivanitis, Ph.D.
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Resilient Wireless and Underwater Communication Systems

Dr. Sklivanitis develops advanced communication frameworks that support autonomous and distributed platforms across challenging domains, including underwater and remote environments. His work focuses on adaptive, energy-efficient systems that maintain connectivity where bandwidth, latency, and signal reliability are constrained, enabling coordinated operation and improved data exchange across next-generation wireless infrastructure.

Oscar Curet, Ph.D.
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Bioinspired Underwater Robotics and Autonomous Systems

Dr. Curet develops bioinspired robotic systems designed to operate in complex marine environments. His work includes robotic fish platforms that integrate sensing and mobility to advance underwater autonomy. By bridging marine biology and engineering, his research contributes to new approaches in ocean exploration, environmental monitoring and intelligent system design.

Zhen Ni, Ph.D.
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Reinforcement Learning and Swarm Autonomy

Dr. Ni's research focuses on reinforcement learning, adaptive control and swarm autonomy, enabling intelligent systems to learn, navigate and operate collaboratively in dynamic conditions. His work supports the development of distributed, scalable autonomous systems with applications in robotics, intelligent transportation and multi-agent environments.

Hari Kalva, Ph.D.
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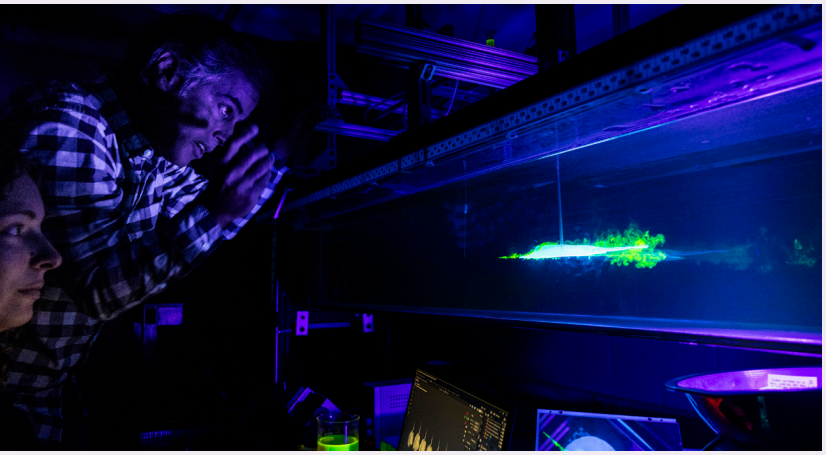
AI-Driven Visual Computing and Intelligent Systems

Dr. Kalva leads research in AI-driven visual computing, advancing machine-to-machine video analytics, intelligent multimedia systems, and real-time decision technologies. His work supports next-generation communication systems and enables intelligent processing of visual data at scale.

> AI is central to our vision for the future of engineering."

Bioinspired Underwater Systems and Ocean Autonomy



Researchers at the College of Engineering and Computer Science are advancing AI-driven underwater systems designed for dynamic ocean conditions. This work focuses on developing autonomous platforms capable of operating with precision and efficiency in challenging marine settings.

Led by Oscar Curet, Ph.D., professor in the Department of Ocean and Mechanical Engineering, the research draws inspiration from aquatic life to design bioinspired autonomous underwater vehicles (AUVs). By replicating the efficient movement of marine organisms, these systems achieve greater maneuverability and energy efficiency, particularly in confined or variable conditions.

In collaboration with researchers from the Center for Connected Autonomy and Artificial Intelligence (CA-AI), the work integrates reinforcement learning, advanced control systems, and real-time sensing to enable platforms to adapt to currents, turbulence, and low visibility. A key focus is overcoming limited underwater communication through distributed autonomy and multi-robot coordination, allowing systems to operate collaboratively with minimal connectivity.

Together, these advances support longer-duration missions, improved navigation, and more efficient operation in remote ocean settings.

AI-Driven Visual Computing and Intelligent Media Systems

Advances in visual computing are redefining how intelligent systems process, interpret, and act on complex data. Through the Multimedia Systems Lab (M-Lab), led by Hari Kalva, Ph.D., research is driving AI-enabled technologies in machine vision, video analytics, and real-time multimedia systems that support scalable visual intelligence.

This work focuses on improving how machines analyze visual data across applications such as healthcare imaging, smart infrastructure, and environmental monitoring. A key area of innovation is Feature Coding for Machines (FCM), a next-generation approach that enables systems to extract, compress, and transmit visual information more efficiently for machine-based interpretation rather than human viewing.

By integrating artificial intelligence with advanced multimedia processing, M-Lab is enhancing how visual data is captured, processed, and understood across distributed systems. These capabilities support faster decision-making, reduced data requirements, and more efficient deployment of intelligent systems.

The lab's impact includes more than 100 granted patents, contributions to international multimedia standards, and technologies deployed in operational systems—demonstrating sustained leadership in intelligent media.

Advancing Autonomous Communications

$2.1 Million Investment Supports Next-Generation Defense Systems

The Center for Connected Autonomy and Artificial Intelligence (CA-AI) is leading a major new effort to strengthen the future of defense communications. Supported by a $2.1 million award from the U.S. Department of Defense Air Force Research Laboratory, Florida Atlantic University is establishing a Center of Excellence for Research and Education in Programmable Wireless Networks in collaboration with the University at Buffalo. The initiative is led by Dimitris Pados, Ph.D., director of CA-AI, with George Sklivanitis, Ph.D., co-principal investigator.

The center addresses one of the most urgent challenges in modern defense: maintaining secure, reliable communications in contested electromagnetic environments. As military systems increasingly depend on wireless communication, radar, GPS, and spectrum-dependent technologies, the work focuses on adaptive, programmable approaches that optimize spectrum use, resist interference, and support mission-critical operations in rapidly changing conditions.

Research is organized around three core priorities: advanced algorithms for agile spectrum operations, secure high-performance hardware for software-defined wireless systems, and education pathways that prepare the next generation of engineers for electromagnetic spectrum operations. These efforts strengthen the technologies and expertise required for future communications, autonomy, and national defense.

> We need to move from rigid, siloed models to programmable and adaptive systems capable of learning, self-optimizing and **collaborating in real time.**
>
> — Dimitris Pados

U.S. AIR FORCE FLIGHT SIMULATOR

The Center for Connected Autonomy and Artificial Intelligence (CA-AI) within FAU's College of Engineering and Computer Science has received an in-kind award for a U.S. Air Force T-1A Jayhawk Mixed Reality (MR) and 3D Motion flight simulator valued at approximately $4.5 million.

Awarded by the U.S. Air Force Office of Scientific Research to FAU's Center for Connected Autonomy and Artificial Intelligence (CA-AI), this in-kind grant expands the university's research capabilities in artificial intelligence, autonomy, and aerospace systems. The simulator will support faculty, students, and industry partners across the FAU research community.

"This is a milestone for our college and for Florida Atlantic University," said Stella Batalama, Ph.D., dean of the College of Engineering and Computer Science. "Having access to this advanced military-grade flight simulation technology on our campus elevates our research enterprise. The Jayhawk simulator will serve as a cornerstone of aviation training, research, and education at FAU, strengthening our leadership in AI, autonomy, human performance, and aerospace systems, while opening new doors for collaboration across the university and our federal and industry partners."

The simulator replicates the cockpit configuration, flight characteristics, and operational environment of the T-1A Jayhawk, a medium-range, twin-engine jet aircraft used by the U.S. Air Force for advanced pilot training. As a mid-tier training device incorporating MR capabilities and a 3D-freedom motion platform, the

system blends physical cockpit controls with immersive digital environments to create a highly realistic, data-rich research setting. The open-source, non-CUI software architecture allows investigators to modify flight models, integrate experimental algorithms, test adaptive autonomy frameworks, and evaluate advanced sensor fusion strategies in real time. Unlike live-aircraft testing, which can cost thousands of dollars per flight hour and is constrained by safety and operational limits, the simulator enables flying in repeatable, high-risk, and degraded-condition scenarios in a fully controlled environment.

Beyond its primary role in aviation-focused research, the T-1A Jayhawk simulator establishes a versatile, high-fidelity platform for a wide range of interdisciplinary studies across FAU. Its mixed-reality, motion-enabled environment allows faculty and students to explore human–machine interaction, autonomous decision-making, and real-time sensor fusion in complex, dynamic scenarios that would be unsafe or cost-prohibitive in real-world conditions. Researchers can study cognitive performance, situational awareness, stress, and decision-making under pressure, while testing new interfaces, control architectures, and AI-driven support systems.

"The T-1A Jayhawk simulator provides us with a reconfigurable, high-fidelity experimental platform to advance both foundational and applied research in autonomous decision-making, real-time sensor fusion, and trustworthy AI for safety-critical environments," said Dimitris Pados, Ph.D., principal investigator, Schmidt Eminent Scholar Professor of Engineering and Computer Science in FAU's Department of Electrical Engineering and Computer Science, director of CA-AI, and an FAU Sensing Institute (I-SENSE) faculty fellow. "We will be able to rigorously test how intelligent systems perform alongside human operators and develop technologies that are robust, resilient, and aligned with mission requirements."

The flight simulator also serves as a laboratory for neuroscience and biomedical research, enabling experiments on cognitive workload, motor control, fatigue, and human performance in immersive, controlled settings. Its capabilities support cross-disciplinary work in cybersecurity, systems engineering, robotics, and advanced manufacturing, providing a safe venue to prototype, evaluate, and refine emerging technologies.

Additionally, the simulator fosters collaborations with industry, government, and community partners, offering hands-on training for students across engineering, computer science, human factors, and related fields.

"In this way, the Jayhawk simulator is a campus-wide engine for innovation, education, and leading-edge experimentation in AI and complex systems," said Batalama.

The expanded research footprint will directly support active federally funded projects, including NIH-supported computational neuroscience research and AFOSR, AFRL, and NSF-funded work in secure and trustworthy cyber-physical systems at CA-AI and FAU at large.

"This capability changes what we can do as a research institution," said Pados. "It empowers our faculty and students to explore complex, real-world challenges in a safe, rigorous, and highly adaptable environment. The Jayhawk simulator is more than a technological asset – it is an enabling platform that will help FAU continue shaping the future of autonomous systems, intelligent technologies, and next-generation aerospace innovation."

The flight simulator is housed at FAU Tech Runway on the Boca Raton campus in newly allocated space designed to support multiple high-impact research initiatives.

Coastal and **Ocean Engineering**

Advancing Coastal and Ocean Systems

Coastal regions require engineering solutions built for resilience and long-term performance. Our research focuses on strengthening infrastructure, advancing marine systems, and expanding ocean energy capabilities through technologies developed and validated in operational settings.

Work spans coastal infrastructure, fluid dynamics, marine robotics, and ocean energy systems, contributing to stronger shorelines, improved offshore performance, and enhanced capabilities for monitoring and understanding marine systems.

Collaborations with government, industry, and regional stakeholders support the development and deployment of these technologies, addressing evolving environmental challenges and advancing coastal engineering solutions at scale.

RESEARCHERS IN ACTION

James H. VanZwieten Jr., Ph.D.
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Southeast National Marine Renewable Energy Center (SNMREC)
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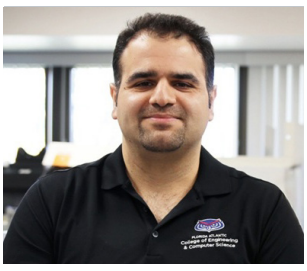
Marine Renewable Energy Systems and Ocean Modeling

Dr. VanZwieten's research focuses on marine renewable energy systems, including ocean current energy, numerical simulation, and oceanographic measurements. His work advances the modeling, optimization, and evaluation of energy systems for complex ocean environments, supporting the development of innovative technologies for marine energy harvesting.



Mohammad Lashaki, Ph.D.
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Harmful Algal Bloom Monitoring and Coastal Water Systems

Dr. Lashaki's research focuses on environmental systems and water quality, with an emphasis on harmful algal blooms in coastal environments. His work integrates engineering approaches with environmental analysis to improve monitoring, characterization, and understanding of bloom dynamics and their impacts on marine ecosystems.

SeaTech

Where Engineering Meets the Ocean

SeaTech, FAU's oceanfront campus in Dania Beach serves as the College's dedicated research facility—providing direct access to coastal environments for testing, validation, and discovery.

Located on the Atlantic coastline in Dania Beach, FL, SeaTech provides direct access to waves, currents, and marine conditions that shape how systems are designed, tested, and refined. This proximity supports research beyond simulation, grounding engineering decisions in observed data and field-based validation.

SeaTech is rooted in FAU's longstanding leadership in ocean engineering, including the establishment of the first ocean engineering undergraduate degree programs in the United States in 1965. This foundation continues to shape research and education, with students actively engaged in field-based projects and applied research.

Through applied testing and system development, SeaTech advances coastal and ocean engineering by supporting technologies designed for changing marine conditions, strengthening the connection between design, performance, and operational readiness across a range of coastal and offshore applications.

ENGINEERING SOLUTIONS FOR CLEANER WATER

Dr. Masoud Lashaki
NSF CAREER Award Recipient, 2026

Harmful algal blooms continue to threaten Florida's waterways, disrupting ecosystems, degrading water quality, and impacting coastal communities across the state. At FAU's College of Engineering and Computer Science, researchers are advancing targeted technologies to address the root causes of these events—developing scalable solutions that remove excess nutrients and restore balance to freshwater systems.

Supported by a $600,000 grant from the Florida Department of Environmental Protection, a research team led by Masoud Jahandar Lashaki, Ph.D., is advancing innovative materials that remove excess phosphorus from freshwater systems—one of the primary drivers of harmful algal blooms.

The project focuses on the development of durable, 3D-printed structures engineered to capture and permanently remove phosphorus from the water. Unlike traditional treatment methods, these materials are designed for real-world deployment, allowing water to flow through them efficiently while reducing nutrient levels that fuel algal growth.

Building on earlier research, the team has demonstrated highly effective phosphorus removal using modified materials that bind and sequester nutrients, preventing their reuse by algae. This next phase translates those findings into scalable solutions that can be deployed, retrieved, and reused in lakes and freshwater systems across the state.

The work extends beyond the lab, with testing underway in real-world environments and a focus on long-term environmental impact. By integrating research, field application, and workforce development, the project reflects a broader commitment to advancing technologies that protect Florida's waterways while preparing the next generation of engineers to address complex environmental challenges.

Engineering Resilient Marine Energy Systems

The Southeast National Marine Renewable Energy Center (SNMREC) advances next-generation coastal and ocean technologies that integrate sensing, data, and infrastructure.

The center focuses on how intelligent systems can better understand and operate within dynamic marine environments—where energy, water, and infrastructure intersect.

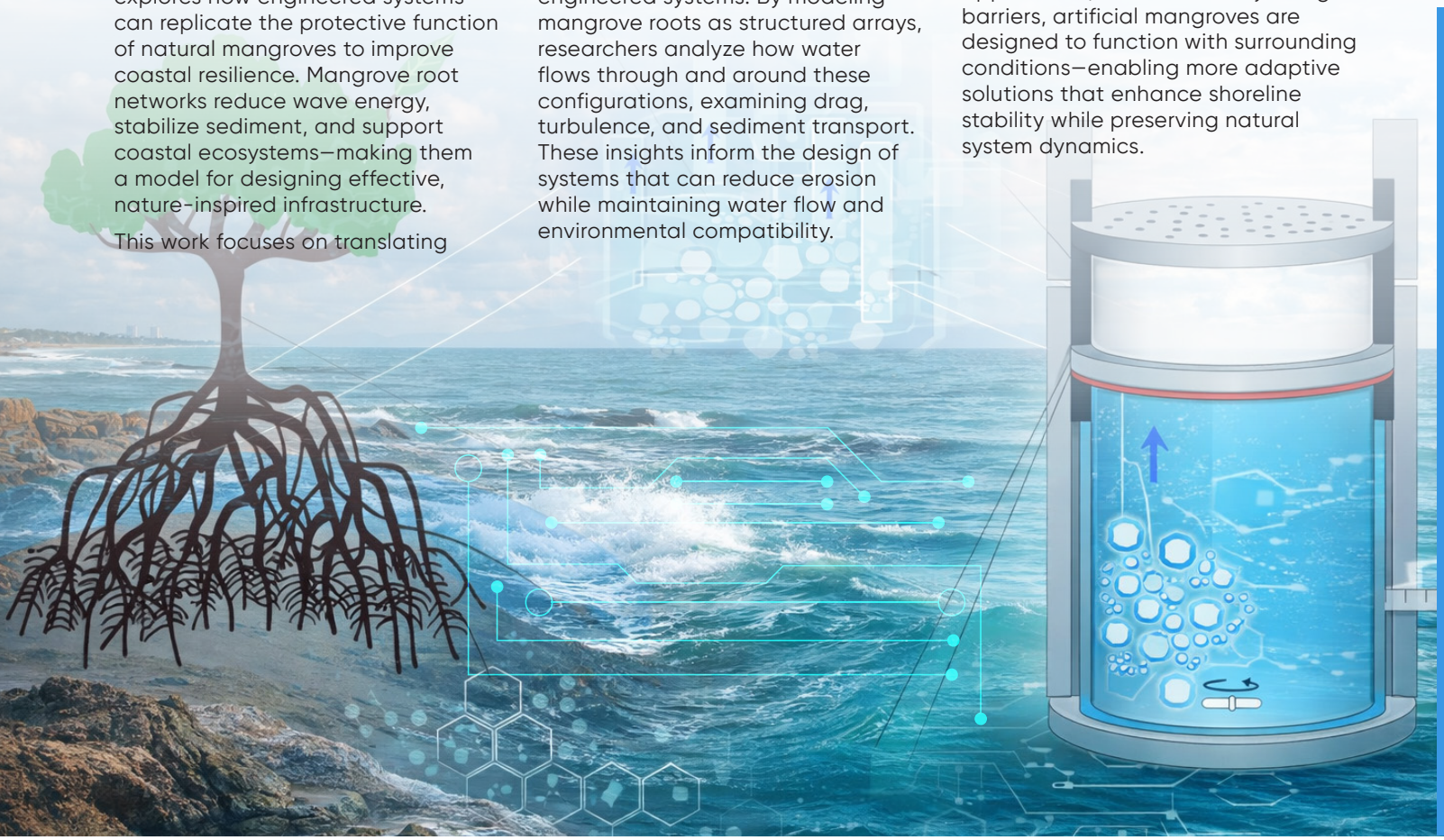
From real-time ocean monitoring to the development of resilient offshore systems, SNMREC supports research that enables smarter decision-making in coastal regions. With advanced sensing technologies, the center is helping shape sustainable solutions for energy, climate resilience, and coastal infrastructure.

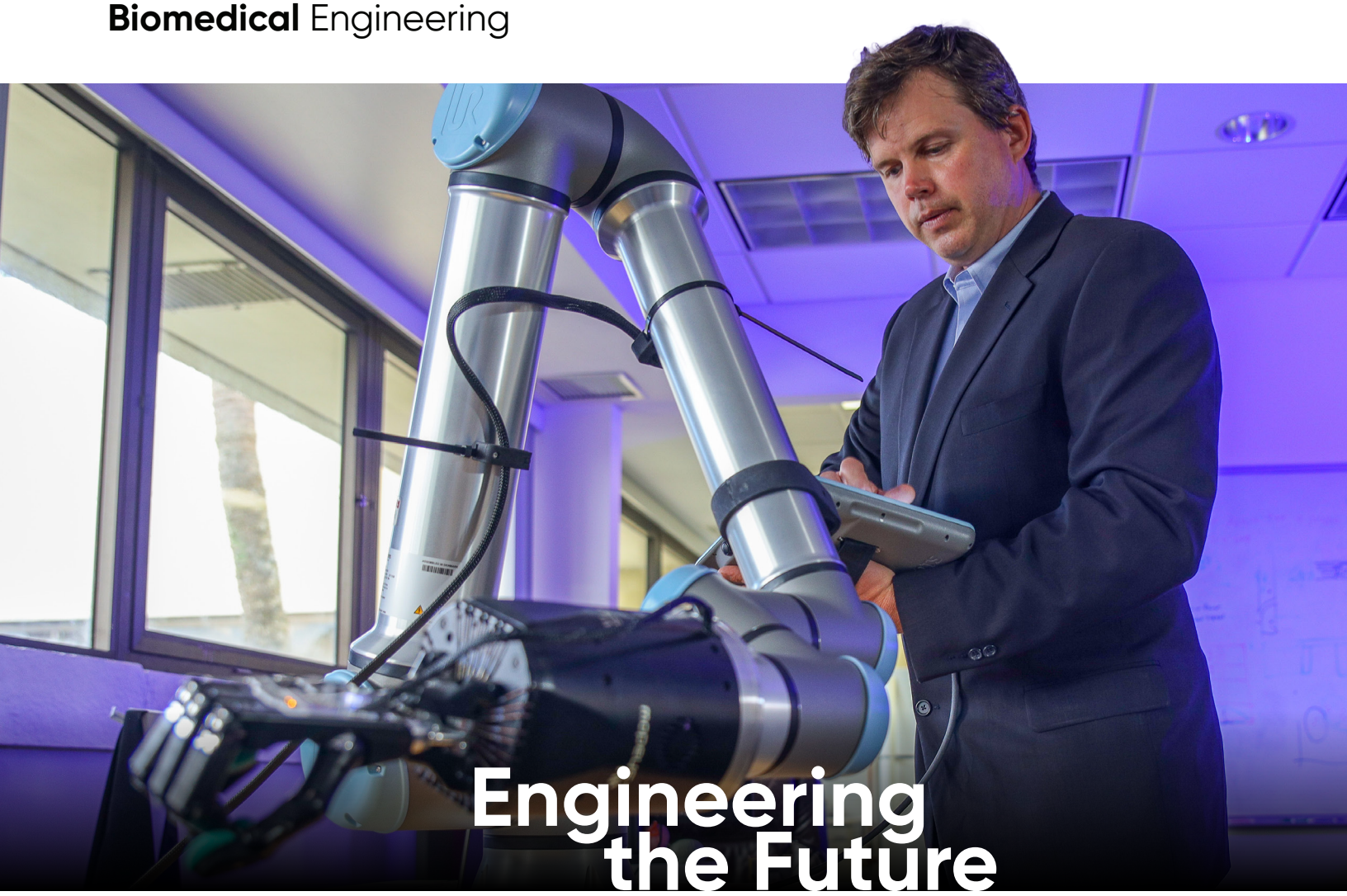
Bioinspired Coastal Protection through Artificial Mangroves

Research led by Oscar Curet, Ph.D., explores how engineered systems can replicate the protective function of natural mangroves to improve coastal resilience. Mangrove root networks reduce wave energy, stabilize sediment, and support coastal ecosystems—making them a model for designing effective, nature-inspired infrastructure.

This work focuses on translating those biological structures into engineered systems. By modeling mangrove roots as structured arrays, researchers analyze how water flows through and around these configurations, examining drag, turbulence, and sediment transport. These insights inform the design of systems that can reduce erosion while maintaining water flow and environmental compatibility.

Unlike traditional coastal protection approaches, which often rely on rigid barriers, artificial mangroves are designed to function with surrounding conditions—enabling more adaptive solutions that enhance shoreline stability while preserving natural system dynamics.





Engineering the Future OF HUMAN HEALTH

Advancing human health requires more than discovery—it demands engineered solutions. Biomedical and neuroengineering research focuses on developing systems and technologies that address critical challenges in healthcare and human performance, supported by capabilities in robotics, sensing systems, biomaterials, microfluidics, and biomedical data analytics. This work deepens understanding of the human body while improving how it is supported, restored, and enhanced through engineering innovation.

Translating Research into Impact

This work spans intelligent prosthetics, neural and optical systems, biosensing platforms, and data-driven biological analysis, supporting applications in rehabilitation, diagnostics, and human performance. Through interdisciplinary collaboration, these efforts translate research into technologies that improve recovery and resilience.

Devices, Systems, and Human Performance

Research also advances engineered devices and systems designed to support human performance. From bioinspired robotics to biomaterials and integrated sensing platforms, these technologies are developed for deployment in healthcare and national defense settings.

RESEARCHERS IN ACTION

Erik Engeberg, Ph.D.
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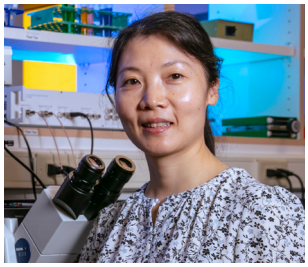
Intelligent Prosthetics and Human–Machine Interaction

Dr. Engeberg develops bio-inspired robotic systems and intelligent prosthetic technologies designed to replicate the dexterity and adaptability of the human hand. His work integrates sensing, control, and machine learning to enhance real-time responsiveness in grasping, object interaction, and human–machine integration.



Sarah Du, Ph.D.
Professor; Co-Director, Center for SMART Health
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Microfluidic Biosensors and Cell Biomechanics

Dr. Du focuses on microfluidic biosensors and cell biomechanics, combining microfluidics, biosensing, and biophysical modeling to study disease at the cellular level. Her research supports diagnostic tools and monitoring systems for conditions such as sickle cell disease and sepsis.

Luke Rosedahl, Ph.D.
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Neuroadaptive Systems and Visual Processing

Dr. Rosedahl investigates neuroadaptive systems and visual neuroscience, exploring how the brain processes and responds to visual information. His work integrates neuroimaging, physiological sensing, and computational analysis to better understand neural function and human performance.

Ramin Pashaie, Ph.D.
Professor; Director, Bio-Inspired Sciences and Technologies Lab (BIST)
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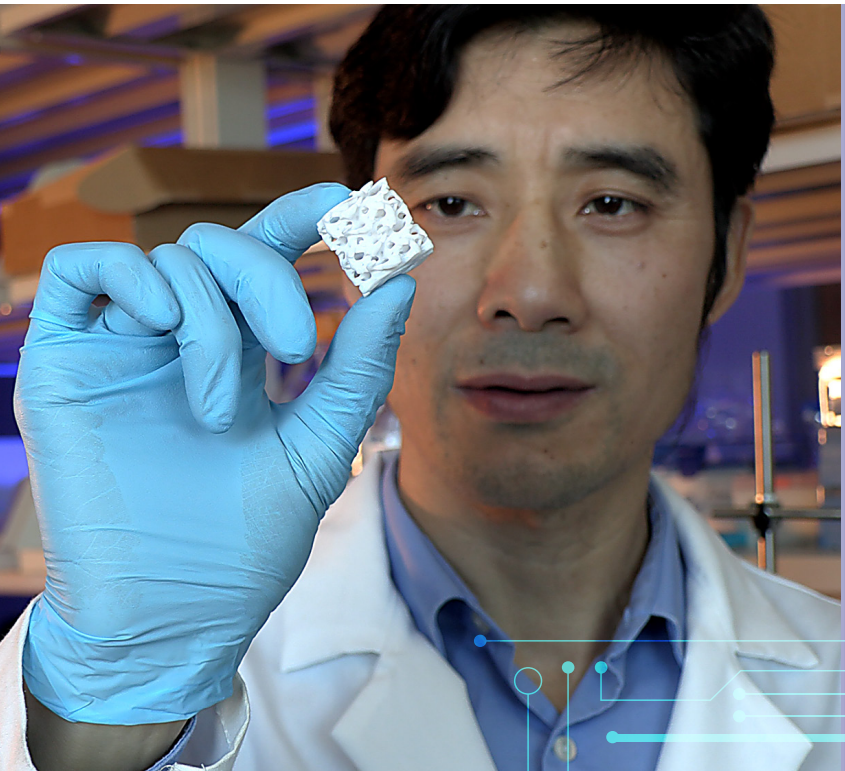
Optical Neurotechnology and Bio-Inspired Imaging Systems

Dr. Pashaie advances optical neurotechnology and bio-inspired imaging systems, combining biophotonics, signal processing, and computational modeling to study neural activity. His research enables new approaches for brain monitoring and neuroscience applications.



Biomaterials and Tissue Engineering

Kevin Kang, Ph.D., is an associate professor in the Department of Ocean and Mechanical Engineering and the Department of Biomedical Engineering. His research focuses on biomaterials, stem cell engineering and regenerative medicine, with an emphasis on developing advanced materials and scaffold systems that support tissue repair and bone regeneration.

Dr. Kang's work examines how engineered bioceramic and polymer-based materials interact with cells to promote healing, including the design of porous scaffolds and targeted drug delivery systems that enhance vascularization and tissue growth. His lab is particularly focused on improving outcomes for bone injuries and defects by creating materials that actively guide and accelerate the body's natural healing processes.

Introducing the Center for OMICS TECHNOLOGY

Powering Data-Driven Discovery

The College of Engineering and Computer Science has launched the Center for Omics Technologies and Data Engineering (CODE), an interdisciplinary research hub advancing engineering-driven innovation across health, biotechnology and environmental systems.

Led by Professor Michael DeGiorgio, Ph.D., CODE brings together multi-omics approaches—including genomics, proteomics and metabolomics—with advanced computational methods to better understand and predict biological systems. Researchers are developing scalable, interpretable models powered by artificial intelligence and data science to accelerate progress in areas such as precision medicine, disease detection and biomanufacturing. The center also serves as a platform for collaboration with industry, health care and government partners while preparing students to lead in emerging fields where data, computation and biology converge.

"This center empowers our faculty and students to ask bigger questions, tackle problems at unprecedented scale, and translate data into knowledge that drives real-world innovation."

HOW THE BRAIN LEARNS TO SEE

Understanding how the brain learns to see is key to advancing both human performance and intelligent systems. Dr. Rosedahl's research is helping make that possible.

Luke Rosedahl, Ph.D., assistant professor in the Department of Biomedical Engineering and a fellow of the Institute for Sensing and Embedded Network Systems Engineering (I-SENSE), is leading research to better understand how the brain learns to see. Supported by a **$746,998 grant from the National Eye Institute** of the National Institutes of Health, his work focuses on visual perceptual learning—the process by which the brain improves its ability to detect subtle differences in visual stimuli.

A key challenge in this field is that these improvements are often limited to the exact conditions under which they are learned. Rosedahl's research investigates how different forms of attention—such as feature-based and spatial attention—interact to enable visual learning to transfer across the visual field, expanding its potential for real-world application.

Using computational modeling, brain imaging, and neurochemical analysis, his team is working to develop a unified model of visual learning and attention. By combining behavioral performance data with advanced imaging techniques, the research aims to reveal how visual information is reorganized in the brain during learning.

This work has the potential to improve vision rehabilitation strategies while advancing training methods in fields that rely on high-level visual performance, including medicine, defense, and advanced imaging.

Engineering Sustainable Infrastructure

Intelligent sustainability at the College of Engineering and Computer Science focuses on building infrastructure systems that use data to operate more efficiently, adapt in real time, and perform reliably under changing conditions. Research spans energy networks, mobility and transportation systems, and the built environment—where sensing, analytics, and control systems are integrated to improve how critical infrastructure is monitored and managed.

By combining predictive analytics with connected infrastructure, this work enables more responsive energy grids and transportation networks, supporting grid reliability, optimized mobility, and more informed decision-making across connected infrastructure.

RESEARCHERS IN ACTION

Jason Hallstrom, Ph.D.
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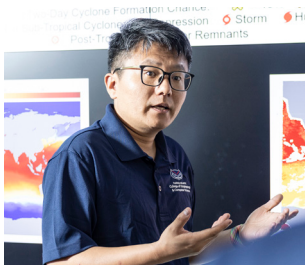
Sensing and Smart Systems for Optimization of Cities

Dr. Hallstrom leads research in intelligent infrastructure systems that enable real-time monitoring and decision-making across complex environments. Through I-SENSE, his work integrates sensing technologies, data platforms, and distributed systems to support applications in smart cities, energy, and environmental monitoring—advancing scalable, data-driven solutions that improve performance and resilience.



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Intelligent Energy Systems and Grid Innovation

Dr. Tang advances intelligent energy systems, focusing on grid optimization, renewable integration, and data-driven energy management. Through the FPL Center for Intelligent Energy Technologies (InETech), his work develops modeling and real-time analytics to improve grid reliability, efficiency, and resilience—supporting more adaptive, scalable energy infrastructure.

ADVANCING INTELLIGENT TRANSPORTATION SYSTEMS

Improving how goods move across connected systems is critical to econmic growth.

Dr. Kaiser leads research in intelligent transportation systems through the Freight Mobility Research Institute (FMRI), where data, modeling, and applied testing address the growing complexity of freight movement. As demand for goods continues to rise, his work focuses on improving how freight moves safely and efficiently across connected transportation networks.

By integrating predictive analytics, simulation, and real-world data, this research supports more responsive traffic systems, optimized logistics, and stronger infrastructure planning. Through partnerships with government and industry, FMRI advances solutions that enhance mobility, reduce congestion, and strengthen supply chain performance—supporting economic growth at regional and national levels.

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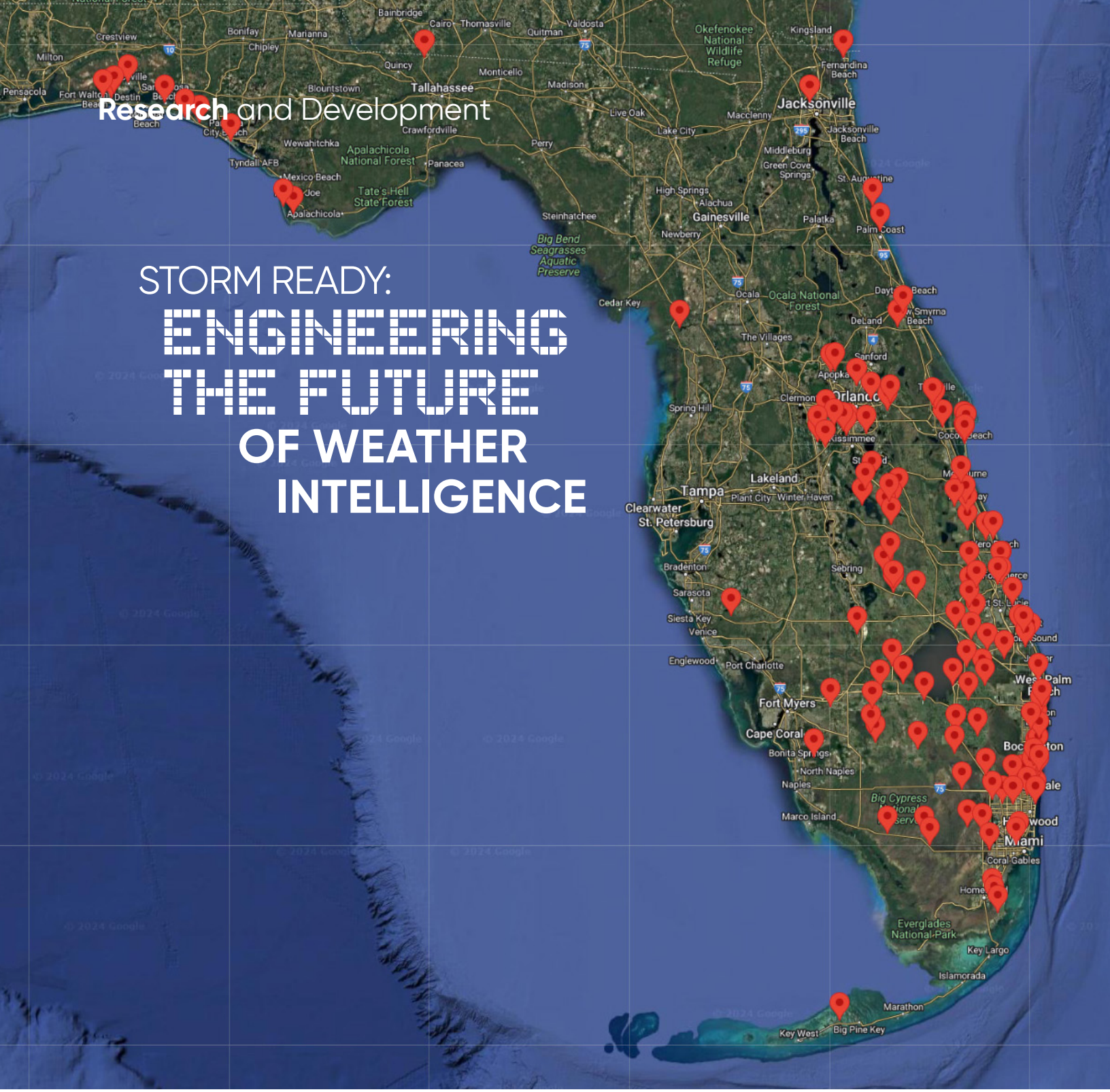


STORM READY:
ENGINEERING THE FUTURE OF WEATHER INTELLIGENCE

Extreme weather events are increasing in frequency and impact, with flooding now responsible for the majority of hurricane-related fatalities. Accurate, real-time data has become critical to predicting these events and protecting communities.

Researchers are advancing a large-scale weather monitoring network that delivers continuous, hyper-local data to improve forecasting, emergency response, and decision-making across Florida and beyond.

Data from the National Hurricane Center shows that 86% of all direct hurricane and tropical storm fatalities in the United States between 2013 and 2023 were caused by water impacts, including freshwater flooding, storm surge and rip currents. More than half of those deaths resulted from inland flooding, underscoring the need for accurate rainfall and flood forecasting.

Florida Atlantic University's Sensing Institute (I-SENSE) is advancing these capabilities through its leadership of the Southeast Atlantic (SEA) Econet, an academic-led network of atmospheric and hydrological monitoring stations that delivers real-time data used by the National Weather Service. Managed in partnership with Coastal Carolina University, the SEA Econet spans from Key West to South Carolina, with FAU leading the Florida subnetwork. The university operates 160 atmospheric and more than 30 water-level stations across 32 counties, forming the largest academic mesonet in the Southeast and the fourth largest in the nation. The network also integrates shared data sources across multiple states, expanding regional coverage and strengthening forecasting accuracy.

This infrastructure powers weather alerts, supports emergency response coordination and enhances public safety across the region.

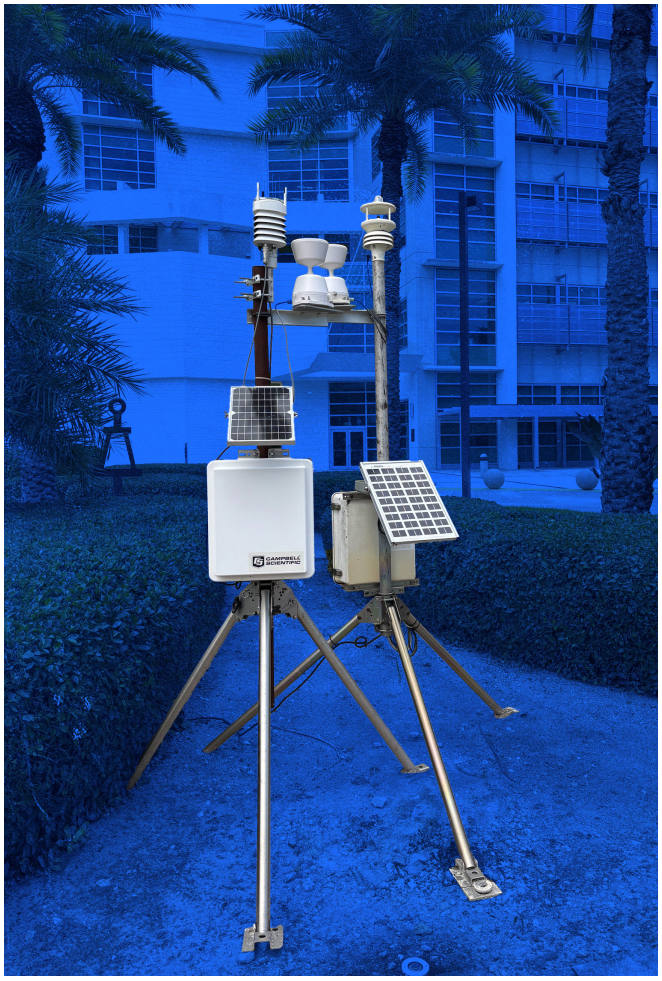
"Every forecast that helps a family seek shelter, every alert that gives emergency crews time to mobilize—it all begins with accurate, real-time data from the ground," said Jason Hallstrom, Ph.D., professor in the College of Engineering and Computer Science and executive director of I-SENSE. "That's what we've built at Florida Atlantic: a statewide infrastructure that quietly powers some of the most critical decisions made during severe weather events. We've designed and deployed a system that delivers immense public value at a fraction of the typical cost."

Developed over 15 years without direct state funding, the network has been supported by more than $8 million in federal research funding. Its cost-efficient design enables broader coverage while maintaining operational performance.

To meet growing demand, I-SENSE plans to expand the network from 160 to 445 stations over the next five years, targeting underserved regions and increasing access to real-time data for emergency responders, government agencies and the public.

Our mesonet network spearheaded by I-SENSE, provides real-time, localized data that directly enhances our ability to predict and respond to hurricanes, flooding and other severe weather events. By expanding this network and continuing to innovate, we can equip communities with the most accurate, timely forecasts available, ultimately saving lives, reducing economic losses, and strengthening Florida's resilience in the face of increasingly frequent and intense storms."

- Stella Batalama, dean, College of Engineering and Computer Science



ADVANCING INTELLIGENT INFRASTRUCTURE

A $1.5 million investment launches a new era of AI-driven infrastructure—where intelligent systems, real-time data, and industry collaboration converge to shape more resilient, efficient communities.

The College of Engineering and Computer Science is advancing intelligent infrastructure through the launch of the Ubicquia Innovation Center for Intelligent Infrastructure (UICII)—a strategic partnership powered by a $1.5 million gift from the Aaron Family Foundation and Ubicquia.

Designed as a hub for innovation, the center brings together artificial intelligence, advanced sensors, and real-time analytics to transform how infrastructure is monitored, managed, and optimized. From strengthening power grid resilience to improving energy efficiency and enhancing public safety, the work emerging from UICII reflects a broader shift toward data-driven, intelligent systems that operate at scale.

At its core, the center connects research with real-world deployment. Faculty and students collaborate directly with utilities, municipalities, and industry partners to accelerate solutions that address critical infrastructure challenges—bridging the gap between innovation and implementation.

This model positions the College at the intersection of engineering, artificial intelligence, and infrastructure—advancing technologies that make cities smarter, systems more adaptive, and communities more connected. As these solutions scale, they contribute not only to regional impact but to national leadership in intelligent infrastructure innovation.

> Through this visionary partnership with the Aaron Family Foundation and Ubicquia, we are advancing an AI-First future – one where intelligent sensors, data analytics and real-time decision tools make communities more resilient, efficient and connected. This center will empower our students and faculty to develop transformative solutions that serve society while building the skilled workforce that will drive Florida's innovation economy. ❞
>
> — Stella Batalama, dean, College of Engineering and Computer Science

AI-Driven Infrastructure

The UICII develops intelligent systems that integrate sensors, edge computing, and analytics to improve infrastructure performance across utility and municipal systems.

Energy and Grid Resilience

Research focuses on improving power quality, strengthening grid reliability, and enabling more efficient energy systems—supporting the transition to smarter, more resilient infrastructure.

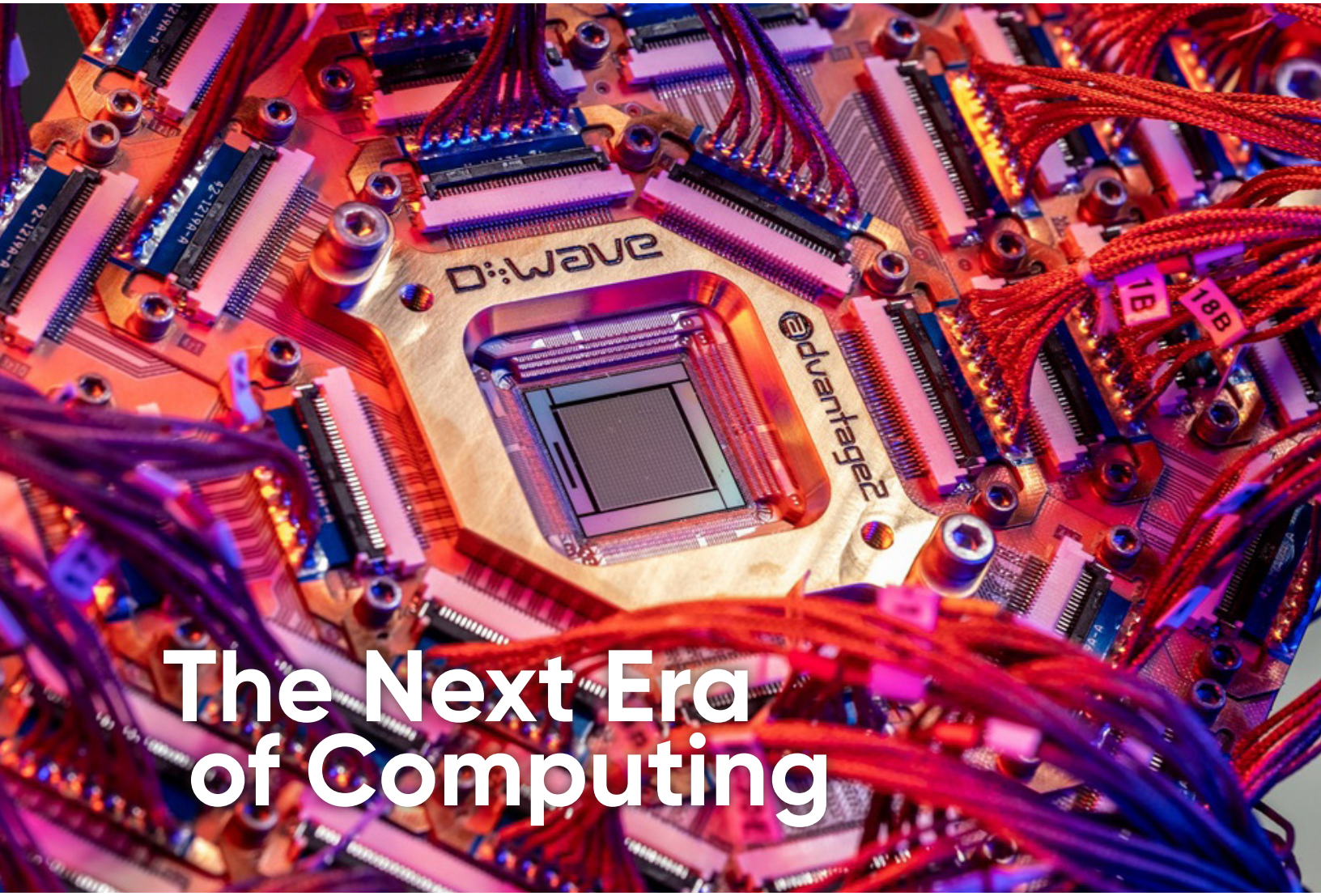
Industry-Embedded Research

Through direct collaboration with utilities, cities, and private-sector partners, the center advances technologies that are designed for deployment—ensuring research translates into scalable, real-world solutions.

Workforce Development

The center provides undergraduate, graduate, and postdoctoral students with hands-on experience working on next-generation technologies, preparing them for careers in research and industry.

UICII builds on the College's broader intelligent infrastructure ecosystem, including collaborations with energy and utility partners and ongoing work in smart cities and sensing systems—creating a unified platform for research, deployment, and impact.



The Next Era of Computing

FLORIDA'S FIRST ON-CAMPUS QUANTUM COMPUTER

Quantum computing is redefining how complex systems are modeled, secured, and optimized. At the College of Engineering and Computer Science, research is advancing quantum algorithms and architectures designed for real-world impact—from data-intensive analysis and resilient wireless communications to post-quantum security and autonomous systems.

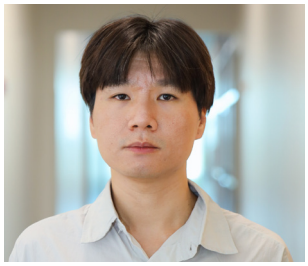
This work is moving beyond theory into deployment, with scalable platforms, quantum machine learning, and secure communication systems developed to address challenges in defense, energy, finance, and healthcare.

RESEARCHERS IN ACTION

Arslan Munir, Ph.D.
Associate Professor; Director, Quantum Computing Initiative (QCI)
Department of Electrical Engineering and Computer Science
arslanm@fau.edu

Quantum Machine Learning and High-Performance Systems

Dr. Munir leads research in quantum machine learning, hybrid quantum-classical systems, and high-performance computing architectures. His work focuses on designing efficient quantum algorithms and circuits that enhance data-driven decision-making and enable advanced applications in intelligent and autonomous systems.



Zebo Yang, Ph.D.
Assistant Professor
Department of Electrical Engineering and Computer Science
yangz@fau.edu

Quantum Networking and Distributed Quantum Systems

Dr. Yang's research focuses on quantum computing, quantum networking, and distributed quantum systems. He is advancing scalable architectures and communication frameworks that support high-performance quantum systems and enable the future development of a quantum internet.

Reza Azarderakhsh, Ph.D.
Professor; Co-Director, Quantum Computing Initiative (QCI)
Department of Electrical Engineering and Computer Science
razarderakhsh@fau.edu

Post-Quantum Cryptography and Secure Hardware Systems

Dr. Azarderakhsh is a nationally recognized leader in post-quantum cryptography, developing secure hardware and cryptographic systems designed to protect against quantum-enabled attacks. His research advances scalable, resilient security solutions for defense, government, and critical infrastructure.

Sareh Taebi, Ph.D.
Associate Professor of Teaching
Department of Electrical Engineering and Computer Science
staebi@fau.edu

Engineering Education and Quantum-Ready Workforce Development

Dr. Taebi focuses on engineering education and curriculum innovation, preparing students to engage with emerging technologies such as quantum computing and advanced device systems. Her work supports the development of a skilled, adaptable workforce aligned with evolving industry needs.

QUANTUM COMPUTING
MEETS PRECISION MEDICINE

Quantum computing is beginning to reshape how complex diseases are detected and understood. Research led by Arslan Munir, Ph.D., at the FAU College of Engineering and Computer Science explores how quantum machine learning can improve the early detection of chronic kidney disease, one of the most challenging conditions to identify in its early stages.

The study directly compares classical and quantum machine learning models using the same clinical dataset, offering a clear view of how these approaches perform side by side. While classical methods remain more efficient today, the quantum model demonstrates strong potential, highlighting how hybrid quantum-classical systems could enhance diagnostic accuracy as the technology continues to evolve.

By combining quantum algorithms with advanced data modeling, this work points toward a future where subtle patterns in patient data can be identified earlier, supporting faster, more informed clinical decisions and advancing precision health.

FAU Leads in Next-Generation Quantum Computing

Florida Atlantic University will become the first in Florida to host a dedicated, on-campus quantum computer powered by a D-Wave Advantage2 system. With a $20 million investment, the initiative expands access to quantum hardware—supporting research, education, and industry collaboration in next-generation computing and emerging quantum technologies.

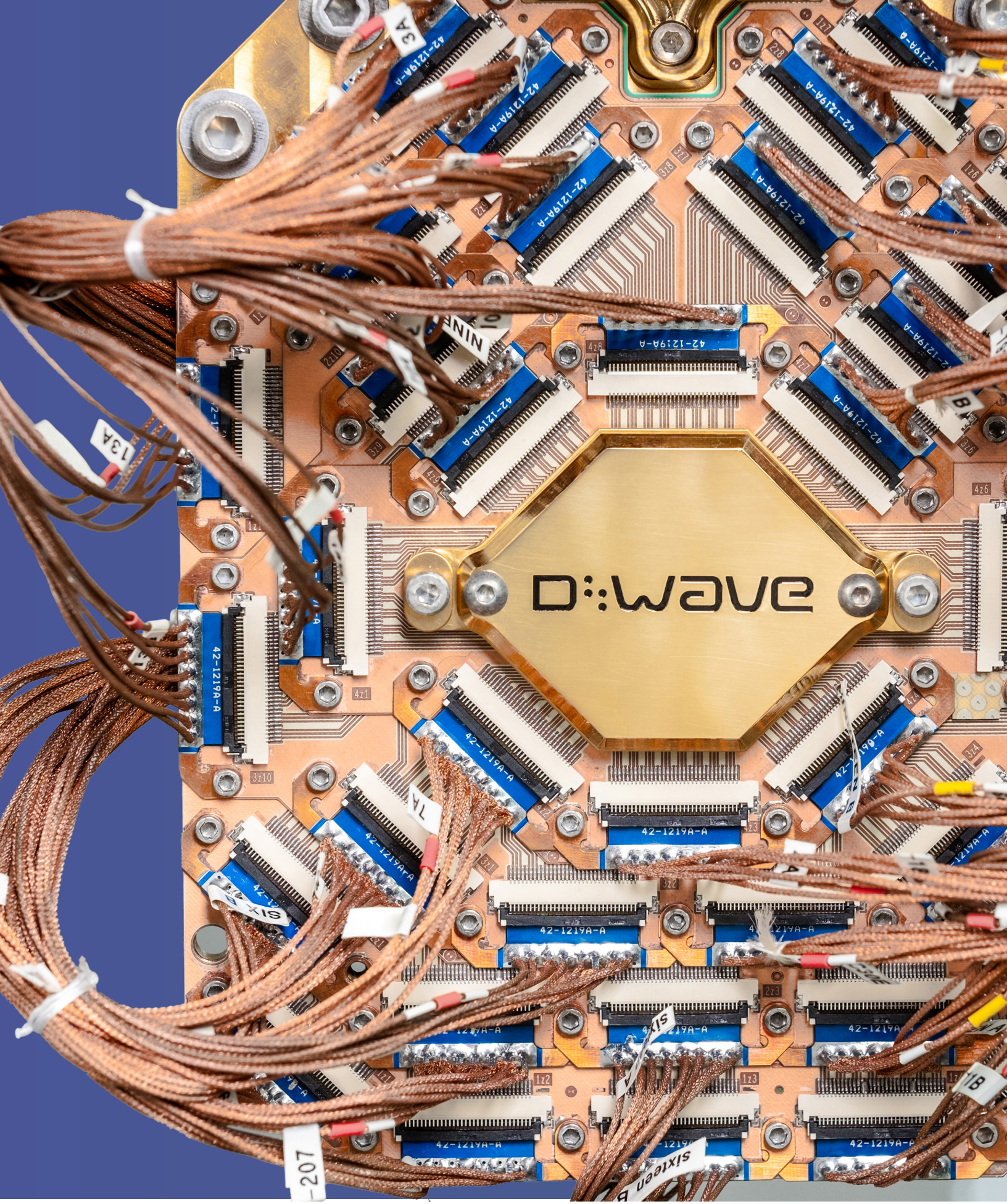
Florida Atlantic University President Hasner recently announced the purchase of a D-Wave Advantage2 quantum computer, making FAU the first university in Florida to host a quantum computer on campus and marking a major milestone for the Florida Atlantic University College of Engineering and Computer Science.

This cutting-edge system provides students and faculty with immediate, hands-on access to quantum computing — today, not a decade from now — enabling work on real-world challenges in optimization across engineering disciplines, including robotics, intelligent infrastructure, energy, logistics, finance, health, and emergency management. The investment aligns naturally with FAU's strengths in engineering, computer science, artificial intelligence, and autonomy, and accelerates the College's vision for integrated, next-generation computing.

"Acquiring the D-Wave Advantage2 quantum computer allows us to build foundational infrastructure that positions Florida Atlantic University to lead in the next generation of computing," said Stella Batalama, Dean of the College of Engineering and Computer Science. "This is part of a deliberate strategy—investing early in transformative infrastructure across AI, autonomy, and now quantum—to elevate FAU as a national leader in research, innovation, and workforce development."

Dean Batalama added that the impact is amplified by D-Wave's growing presence in South Florida, including the relocation of its headquarters and the establishment of a research center just two miles from FAU's Boca Raton campus. "This proximity creates extraordinary opportunities for collaboration, talent development, and industry-engaged research, making this an especially exciting moment for our College and our community."

This investment strengthens the College's mission to deliver world-class education, foster interdisciplinary research, and translate advanced technologies into solutions that have a meaningful impact on the region, the state of Florida, and the nation.


D:wave

Alumni **Spotlight**

FROM FAU TO FLIGHT DUTY

LT. CRISTINA SILVA, CLASS OF 2019
B.S. IN MECHANICAL ENGINEERING

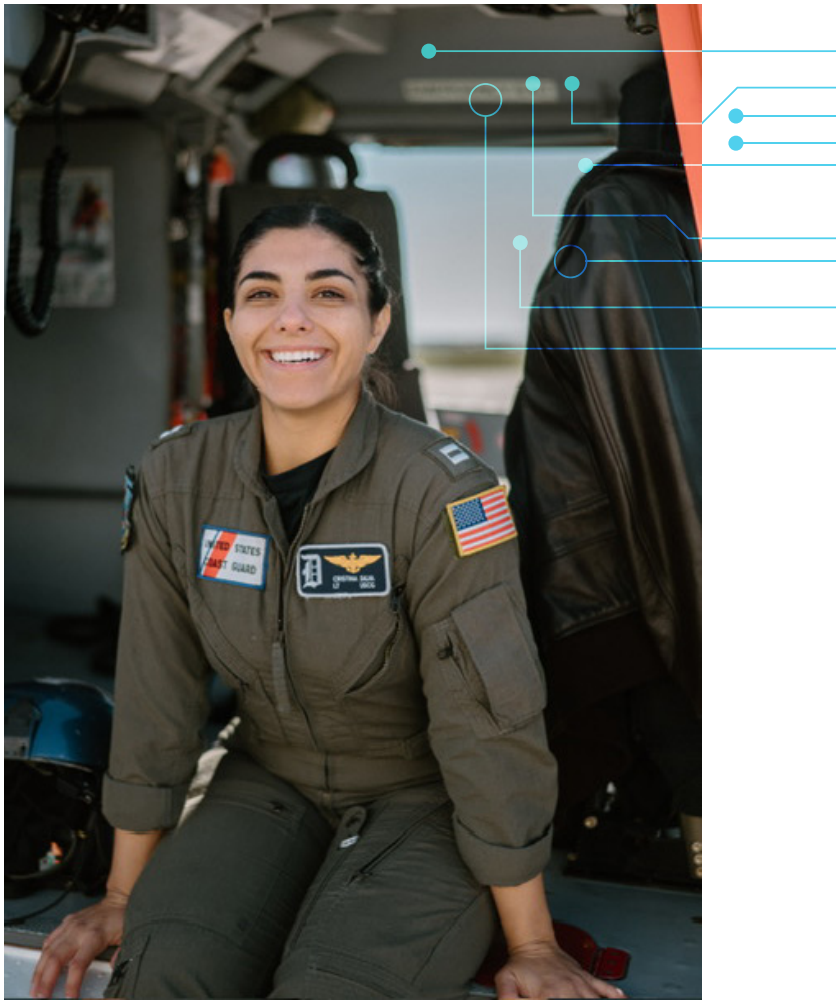
Cristina Silva's mechanical engineering education helped prepare her for service and leadership in the U.S. Coast Guard.

For Cristina Silva, a degree in mechanical engineering from Florida Atlantic University was more than technical preparation. It was the foundation for a career defined by leadership, service and highstakes decision-making.

Today, Silva serves as an officer in the U.S. Coast Guard and as a pilot of the MH-65E helicopter, where she relies on the same critical thinking, teamwork and systems knowledge she developed as a student.

She credits FAU's Mechanical Engineering program with helping shape her path by giving her opportunities to lead, solve problems and work collaboratively. Classroom experiences taught her how to approach challenges with different perspectives, while extracurricular involvement helped her apply those skills in meaningful ways.

"FAU's Mechanical Engineering degree guided my path to excelling in the U.S. Coast Guard with opportunities to lead and use critical thinking skills," Silva said.



Outside the classroom, student organizations such as Formula SAE, the human-powered submarine team and Alpha Omega Epsilon allowed her to expand on her interests, strengthen her leadership skills and build community.

In her current role, Silva sees the value of that engineering education every time she steps into the cockpit. As a pilot, understanding the aircraft's systems is essential, especially in emergency situations where mechanical failure, weather and mission pressure can all converge at once.

"Having this basis of understanding supports discussions with Flight Mechanics to analyze as a crew the potential hazards and mitigate, as necessary," she said.

For students interested in combining a technical education with military or service-oriented careers, Silva emphasizes that the opportunities are broader than many realize.

"The military offers plenty of diverse opportunities," she said. "Find what you love to do and utilize the benefits for furthering your education and seeing the world."

HER ADVICE IS SIMPLE: TAKE INITIATIVE, GO BEYOND THE CLASSROOM & KEEP INVESTING IN YOUR FUTURE.

Our **Academics**

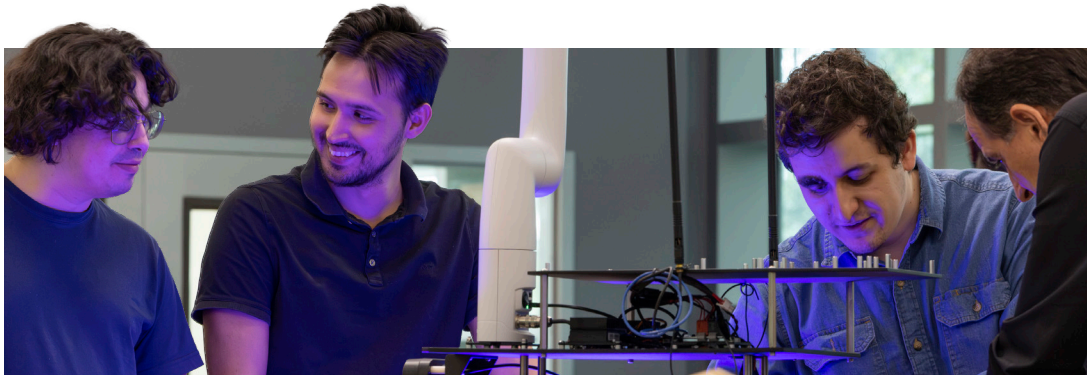
Programs

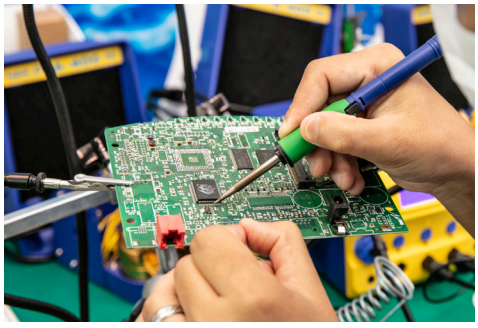
- Artificial Intelligence
- Biomedical Engineering
- Civil Engineering
- Computer Engineering
- Computer Science
- Cybersecurity
- Data Science and Analytics
- Electrical Engineering
- Environmental Engineering
- Geomatics Engineering
- Information Technology & Management
- Mechanical Engineering
- Ocean Engineering
- Transportation & Environmental Engineering

Undergraduate programs are accredited through the Accreditation Board for Engineering and Technology (ABET). All academic programs are also accredited by the Southern Association of Colleges and Schools (SACS).

R&D and Education Centers

- Center for Connected Autonomy and AI (CA-AI)
- FPL Center for Intelligent Energy Technologies
- Center for Omics Technologies and Data Engineering (CODE)
- NSF Center for Smart Streetscapes (ERC)
- Southeast National Marine Renewable Energy Center (SNMREC)
- Center for SMART Health
- Gangal Innovation Hall and Fabrication Lab
- Freight Mobility Research Institute (FMRI)
- I-SENSE University-wide Engineering Institute
- IUCRC—Center for Advanced Knowledge Enablement (CAKE)





Community **Impact**

Inside Biomedical Engineering

Nearly 100 students from Saint Andrew's School spent the day at the College of Engineering and Computer Science exploring biomedical engineering through hands-on experiences and lab tours. The visit introduced middle-school students and their teachers to the interdisciplinary research shaping the future of healthcare.

The day began with an overview of biomedical engineering and how engineers collaborate with scientists and clinicians to solve complex healthcare challenges. Students then moved into guided laboratory rotations, engaging directly with faculty and researchers.

In the Center for SMART Health, students explored innovations in biomedical sensing, signal analysis and intelligent health monitoring systems designed to support earlier detection and treatment. In the Biomaterials and Tissue Engineering Lab, they learned how advanced materials—from bioceramics to nanoparticles—are being developed for regenerative medicine and targeted therapies.

The experience concluded in the College's Fabrication Lab (Fab Lab), where students saw how engineering ideas become reality through hands-on design and fabrication using 3D printers, laser cutters and advanced prototyping tools.

Experiences like this provide early exposure to emerging technologies while offering a firsthand look at how engineering continues to drive the future of healthcare.

Engineer Your Future Day

The FAU College of Engineering and Computer Science welcomed more than 700 middle and high school students from 17 regional schools for Engineer Your Future Day—an immersive experience introducing students in grades 7–12 to the possibilities within engineering and computer science.

Students engaged with the college's four academic departments through interactive presentations and hands-on activities, gaining exposure to fields ranging from biomedical engineering to artificial intelligence and sustainable infrastructure. A student panel offered a candid look at the FAU experience, with discussions around coursework, internships, mentorship and career pathways.

Across campus, participants explored labs and innovation spaces where engineering comes to life. From autonomy and AI to energy systems, smart health and robotics, students experienced how emerging technologies are developed and applied. Demonstrations in civil and environmental engineering highlighted real-world solutions, including cement 3D printing, water quality testing, smart sensors and drone technologies.

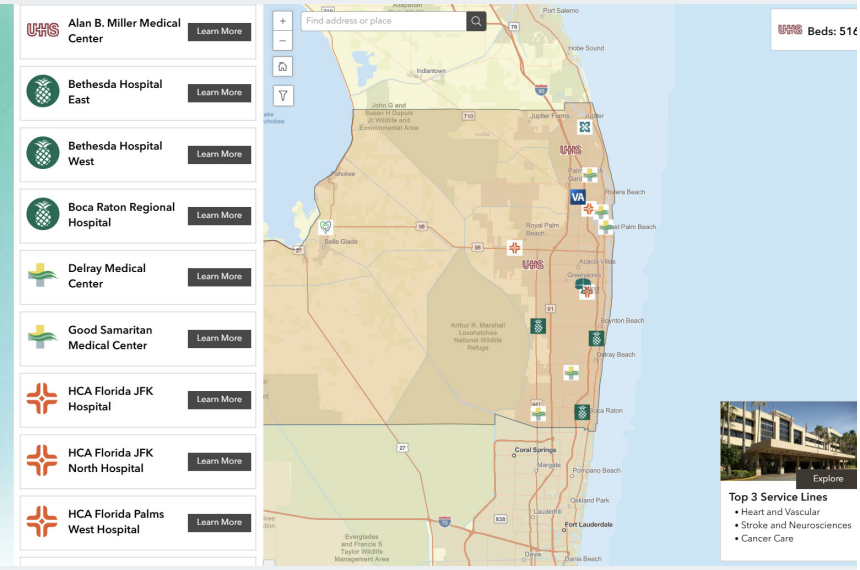
The event also showcased FAU's vibrant student community. Engineering clubs and competition teams—including Owls Racing, the Marine Robotics Club, the Human-Powered Submarine Team and the Aerospace Experimental Association—shared hands-on projects and design work. The Senior Design Showcase provided a glimpse into capstone projects, demonstrating how students translate classroom learning into collaborative, real-world solutions.

Student organizations and industry partners further connected attendees to future academic and career opportunities, reinforcing the breadth of pathways within engineering and computer science.

Engineer Your Future Day reflects the college's commitment to expanding access to engineering and inspiring future innovators—demonstrating how early exposure can spark curiosity, build confidence and shape the future.

Innovation in our Community

Mapping Healthcare Across Palm Beach County



The FAU College of Engineering and Computer Science played a leading role in developing the Palm Beach County Healthcare Asset Map, a comprehensive, interactive platform that visualizes the region's healthcare ecosystem. Created in partnership with the Business Development Board of Palm Beach County and healthcare leaders across the region, the tool provides an accessible, data-driven view of hospitals, services, and specialties throughout the county.

Designed for both residents and professionals, the Healthcare Asset Map enables users to explore available resources while gaining a clearer understanding of the region's growing medical infrastructure. By consolidating complex data into a user-friendly interface, the platform supports more informed decision-making and highlights the depth and strength of Palm Beach County's healthcare network.

"The College of Engineering and Computer Science applied its expertise in data visualization and systems engineering to create an accessible, interactive platform that directly benefits our community," said Stella Batalama, Ph.D., dean of FAU's College of Engineering and Computer Science. "The Healthcare Asset Map supports Palm Beach County's efforts to connect residents, providers, and businesses while highlighting the region's healthcare resources and strengthening access through innovation."

Advancing Intelligent Infrastructure Through Smart Streetscapes

Smarter, more connected cities begin at the street level. Through its CS3 Smart Streetscapes initiative, Florida Atlantic University's College of Engineering and Computer Science is developing technologies that embed intelligence directly into the built environment—transforming how infrastructure is monitored, managed, and optimized in real time.

The initiative integrates sensing systems, edge computing, and advanced data analytics to capture and interpret conditions across transportation networks, energy systems, and public spaces. These capabilities support more adaptive and responsive infrastructure, enabling applications such as traffic flow optimization, environmental monitoring, and enhanced public safety. By turning real-time data into actionable insights, Smart Streetscapes helps communities operate more efficiently while improving resilience and performance.

Working in collaboration with municipal partners and industry, the initiative reflects the College's broader leadership in intelligent systems and connected infrastructure. As cities continue to evolve, CS3 Smart Streetscapes is advancing scalable, data-driven solutions that bridge research and real-world deployment.

Faculty **Spotlight**

Isaac Elishakoff, Ph.D., is a Distinguished Research Professor in the Department of Ocean and Mechanical Engineering. His research spans vibration engineering, structural mechanics, and probabilistic methods, with applications across infrastructure, aerospace, and advanced materials. His work has earned numerous international honors and continues to influence both academic research and engineering practice worldwide.

Dr. Elishakoff, Distinguished Research Professor in FAU's College of Engineering and Computer Science, has been appointed to three of the most prestigious committees within the Engineering Mechanics Institute of the American Society of Civil Engineers (ASCE): the Raymond D. Mindlin Medal Committee, the Maurice A. Biot Medal Committee, and the Alfred Freudenthal Medal Committee. These committees represent the highest level of recognition in engineering mechanics, selecting individuals whose work has fundamentally advanced the field and shaped modern approaches to structural analysis, materials behavior, and system reliability.

His appointment places him among a select group of internationally recognized experts entrusted with evaluating and honoring groundbreaking contributions in applied solid mechanics—an area that underpins critical advancements across infrastructure, aerospace systems, energy, and emerging technologies. Through this role, Elishakoff contributes directly to defining excellence within the discipline, helping to identify the research and innovation that will influence the next generation of engineering practice and scholarship worldwide.

Over the course of a distinguished career spanning more than five decades, Elishakoff has built a global reputation for his pioneering work in vibration analysis, probabilistic methods, and structural mechanics. His research has helped engineers better understand uncertainty in complex systems—an essential challenge in designing resilient infrastructure, advanced materials, and high-performance engineering systems. By bridging theoretical development with applied engineering problems, his work has influenced how reliability, risk, and performance are evaluated across disciplines.

With more than 630 publications and 34 books, Elishakoff's scholarship has had a profound and lasting impact on the field. His work continues to be widely cited and applied across academic, industrial, and governmental research environments, shaping both foundational theory and practical engineering solutions. He has collaborated with leading researchers around the world and contributed to advancing engineering education through mentorship and international engagement, further extending the reach of his work beyond the classroom and laboratory.

His selection to these committees recognizes achievement at the highest level and reinforces the growing global presence of Florida Atlantic University's College of Engineering and Computer Science. As the College continues to expand its research footprint across critical areas of engineering and technology, faculty leadership at this level reflects its role in advancing knowledge, influencing industry, and addressing complex global challenges.

Global Impact

CA-AI Students Excel at Maritime Robotics and AI International Competition

Students from FAU's Center for Connected Autonomy and Artificial Intelligence (CA-AI) within the College of Engineering and Computer Science made a strong impression at the 2025 IEEE Symposium on Maritime Informatics and Robotics held in Syros, Greece. This prestigious international conference brought together researchers and industry leaders advancing maritime autonomy robotics and artificial intelligence.

Undergraduate student Eoghan McIvor was invited to present original research during a technical session. His presentation focused on a modular and scalable software architecture for underwater remotely operated vehicle ROV control highlighting innovative approaches to flexible system design in challenging marine environments and marking his first international conference presentation.

The symposium also featured the Aegean Ro Boat Race, an international competition showcasing autonomous marine robotics. Representing Florida Atlantic University, McIvor and fellow undergraduate Mark Zagha earned first place among student teams demonstrating strong technical skill, teamwork, and real world application of classroom and research experience.

Faculty and college leadership recognized the students' accomplishments as a testament to the rigorous interdisciplinary research environment within the College of Engineering and Computer Science. Their success underscores the college's commitment to experiential learning and highlights Florida Atlantic University's expanding influence in autonomous systems, artificial intelligence and marine robotics on an international stage.

Building Bridges in Africa

Through its ongoing partnership with Engineers in Action, FAU civil engineering students are helping connect rural communities in Eswatini, Africa to essential services by designing and building safe, reliable pedestrian bridges. These structures provide critical access to schools, healthcare, and local economies—transforming daily life for residents who previously faced dangerous or impassable routes.

Students gain hands-on experience working alongside local partners, applying their skills in real-world environments while developing leadership and problem-solving abilities. The initiative delivers both immediate community impact and meaningful, applied learning—extending the reach of **engineering far beyond the classroom.**

From Data to Discovery in Precision Medicine

Data Engineering for Precision Medicine Hackathon, held April 3–4, brought together student teams to develop solutions using one of the nation's largest health datasets. Through hands-on, team-based work, participants applied AI and data science to real-world healthcare challenges, building disease risk prediction models and software prototypes while addressing issues such as scalability, bias, and usability.

The program has continued to expand, with three hackathons held between Fall 2024 and Spring 2026, engaging nearly 800 students, including 183 active participants across 44 interdisciplinary teams. Structured onboarding to the All of Us Researcher Workbench is paired with applied experience in biomedical data preprocessing, machine learning, and predictive modeling—equipping students with both technical depth and practical application skills.

During the Spring 2026 semester, this work gained national visibility when a faculty representative was invited to present the hackathon model at a workshop hosted by the All of Us Data and Research Center at Vanderbilt University Medical Center. The invitation, extended following a recommendation from a previous collaborator, reflects growing recognition of this approach as an effective, scalable model for training students to work with the All of Us Researcher Workbench.

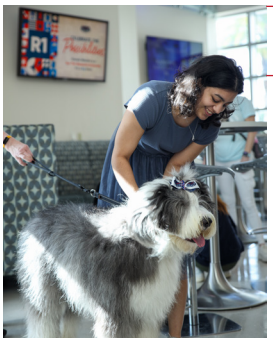
Students have produced a range of outcomes, from developing disease risk prediction models paired with user-focused interfaces to continuing their work alongside faculty on research projects moving toward publication. Several participants have also secured internships and full-time roles with industry partners. As the program continues to grow, it is creating new opportunities for students to engage with real-world data and contribute to advancements in precision medicine.

the Social Engineer

@fauengineering

E-Week Talent Show

Engineers Week took center stage as students stepped into the spotlight for a high-energy Talent Show, showcasing everything from music and dance to unexpected hidden talents. The event brought the college community together for creativity and connection.



Paws for Relief

Our students took a well-deserved break from their coursework to enjoy a special visit from Bonafide Therapy Dogs. Offering a moment of calm and connection, bringing smiles, wagging tails, and a little extra comfort to help our hardworking students recharge.

Roboboat Competition

College of Engineering and Computer Science students showcased innovation and teamwork at the annual RoboBoat Competition in Sarasota, FL, designing and building autonomous surface vehicles to compete against teams from around the world.

Go Owls!

College Growth in Numbers (2017–2024)

- **233%** Research Expenditures
- **351%** Graduate Student Enrollment
- **558%** Graduate Student Enrollment in CS
- **254%** 4-Year FTIC Graduation Rate
- **251%** Graduate Teaching & Research Assistants
- **545%** Student Internships
- **450%** Undergraduate Research Engagement
- **100%** Postdoctoral Scholars

FLORIDA ATLANTIC

COLLEGE OF ENGINEERING & COMPUTER SCIENCE

ENGINEERING AND COMPUTER SCIENCE

SPRING 2026

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MISSION STATEMENT
The College of Engineering and Computer Science at Florida Atlantic University is dedicated to shaping the future through cutting-edge research and transformative education. Internationally recognized for our expertise in Computer Science and Artificial Intelligence, Biomedical Engineering, Computer Engineering, Electrical Engineering, Civil, Environmental and Geomatics Engineering, Mechanical Engineering, and Ocean Engineering, we stand as pioneers in technology advancements.

BEST COLLEGES U.S.News & WORLD REPORT COMPUTER SCIENCE 2026

ABET Computing & Engineering Accreditation Commissions

SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS COMMISSION ON COLLEGES ACCREDITED INSTITUTION

Your **Support**

Dear friends,

Invest in the College of Engineering and Computer Science at Florida Atlantic University.

As the Director of Development for the College of Engineering and Computer Science at Florida Atlantic University, I want to emphasize the significant impact your support can have on our institution and the students we aim to empower.

Our College is a hub of innovation and education, where cutting-edge research meets hands-on learning. Your generous donation will contribute to key areas:

1. Student Scholarships: Your support benefits bright students pursuing engineering and computer science, removing financial barriers.
2. Research Advancements: Your donation fuels groundbreaking research and supports faculty projects that drive innovation.
3. State-of-the-Art Facilities: Your contribution helps us maintain and enhance labs, classrooms, and collaborative spaces to foster creativity.
4. Industry Partnerships: Your support strengthens ties with leading companies, providing students real-world experiences and career opportunities.
5. Community Outreach: Your donation promotes STEM education in the community, inspiring future generations.

Invest in the future of technology and innovation at Florida Atlantic University's College of Engineering and Computer Science. Together, we shape the future.

Thank you for considering this opportunity to make a difference.

Warm regards,

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Director of Development
College of Engineering and Computer Science
Florida Atlantic University
Desk: 561.297.2083 **Cell**: 805.448.5430
E-mail: millermichael@fau.edu

ENGINEER THE FUTURE.

FLORIDA ATLANTIC UNIVERSITY

College of Engineering and Computer Science

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