“In almost every imaginable measure of performance, impact and productivity, Stevens has reached new heights of achievement. The best is yet to come.”

— Nariman Farvardin, President
As I look through the window of my office, I can’t help but feel immense pride in the most visible symbol of Stevens’ past decade of progress — the magnificent University Center Complex. Merely an idea when we launched our strategic plan in 2012, this iconic building is now a reality, providing state-of-the-art residential space for nearly 1,000 students starting in 2022, a modern hub for campus life and a bold statement to the New York metro area that Stevens is on the rise.

This building is only one example of the transformational progress Stevens has achieved over the past 10 years. In almost every imaginable measure of performance and impact, Stevens has reached new heights: enrollment growth; academic profile and diversity of our student body; growth of our faculty and their increased impact in teaching and research; expanded and modern physical and IT infrastructure; and increased engagement and support from our 50,000 alumni across the globe.

While these achievements are impressive both individually and collectively, I am most heartened by what they mean for our future. During the past 10 years, Stevens has produced enormous value for our students who graduate and go on to launch and lead companies with spectacular rates of success; for our innovation-based economy that depends on the technology talent that our university provides; and for our society that increasingly needs ethical, responsible and technology-savvy citizens.

I am confident that Stevens Institute of Technology will continue to play a leading role in our nation and our world in the years ahead.

I invite you to review the progress of the past decade in this President’s Report. I hope you will take pride in all that we have achieved together and join us as we embark on charting the course for the next decade.

Per aspera ad astra,

Nariman Farvardin
President
Stevens Institute of Technology’s 10-year strategic plan, *The Future. Ours to Create.*, has guided the university’s successful transformation over the past decade to become a premier, student-centric, technological research university. Stevens’ progress has been nothing short of remarkable by nearly every measure. The university’s growth and achievements have provided life-changing opportunities for students, particularly those who have been underserved and underrepresented in STEM. The university’s progress has attracted world-class faculty who are tackling critical and complex societal challenges and preparing tomorrow’s innovators and leaders in science, technology, engineering and math. This transformational progress provides a launchpad for the future.
STUDENTS ON THE RISE (2011-2021)
All data included in this report is for the period of Fall 2011 through Fall 2021, unless otherwise specified.

Undergraduate Growth
- 67% increase in undergraduate enrollment
- 214% increase in undergraduate applications
- 145 point increase in average SAT score

Graduate Growth
- 73% increase in graduate FTE enrollment
- 272% increase in graduate applications

Outcomes
- 97% of the Class of 2021 secured career outcomes in intended fields within six months of graduation
- #14 among “Best Value Colleges” in Payscale’s College ROI Report
- 2,748% increase in fully online graduate enrollment

A CAMPUS ON THE RISE
- $462M invested in new and upgraded facilities
- 100% of classrooms renovated with AV/IT upgrades

GIVING ON THE RISE
- $200M+ fundraising campaign completed in 2021
  - 45,000+ unique gifts from 14,000+ donors
- 377% increase in new gifts and pledges, 2011-2021

FACULTY AND RESEARCH ON THE RISE
- 38% increase in full-time faculty and lecturers
- 97% increase in research funding
Students on the Rise
Undergraduate Growth, Diversity and Stellar Success

Stevens’ 2012-2022 strategic plan set a target to increase enrollment by 60% to 4,000 undergraduates, to recruit truly outstanding students, to enhance diversity and to fortify Stevens’ consistently strong post-graduate outcomes. Most of these goals were surpassed one year ahead of schedule.

Strategic Plan Goals for 2012-2022 Surpassed Ahead of Schedule: Stevens is Well-Positioned for the Future

- **67%** increase in undergraduate student body to 4,064
- **1,432** avg. SAT score in 2021, 145-point increase since 2011
- **98%** increase in the number of women undergraduates
- **214%** increase in undergraduate applications
- **97%** placement rate within six months of graduation, Class of 2021
- **149%** increase in the number of underrepresented minorities in the undergraduate cohort
- **63%** increase in undergraduate degrees awarded
Six-Year Graduation Rate

<table>
<thead>
<tr>
<th>2005 entering cohort</th>
<th>2015 entering cohort</th>
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</thead>
<tbody>
<tr>
<td>78%</td>
<td>87%</td>
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</table>

The Power of Mentorship

Kaitlin Gili ’20 credits her achievements in quantum physics to the mentors who guided her very successful undergraduate career. Working alongside physics professor Rupak Chaterjee, Gili developed methods fusing classical computing algorithms with quantum-influenced models and co-authored a journal paper based on that research. “I saw clearly the power and the difference one great mentor can make,” said Gili. That experience led her to co-found EWAAB (Encouraging Women Across All Borders), a global nonprofit pairing mentors with undergraduate women in STEM fields. Gili is currently pursuing her Ph.D. in atomic and laser physics at Oxford University with a full fellowship from the Army Research Office.

Securing Remote Interactions

With the pandemic necessitating remote interactions across both professional and personal lives, computer engineering major Bryan Kyritz ’22 sped up the launch of SecureMeeting, a video software tool he created to provide improved security and privacy for users. Having developed the video conference and chat tool as part of Launchpad@Stevens, Kyritz used open-source code, enabling voice and video capabilities while eliminating the need to download software or store user data. Because no data is stored, data cannot be hacked or stolen. And it’s available at no cost. “Ultimately, we want to unite people, so we are making it available to as many as possible right now. We hope a lot of people will benefit,” Kyritz explained. SecureMeeting is currently used in 80 countries and has hosted over 50,000 calls in the past year.

Filling a Need with the First Black Fraternity

Looking to increase advocacy and social opportunities for Black students at Stevens, Grant Fowler ’21 and Jerome Massicot ’21 resolved to establish the first Black fraternity in Stevens’ history. The students, who had grown to a group of six, chose Alpha Phi Alpha based on the national fraternity’s sense of brotherhood, work ethic and high-profile alumni, including the Rev. Dr. Martin Luther King, Jr., Olympic gold medalist Jesse Owens and Supreme Court Justice Thurgood Marshall. While growing their organization at Stevens, Alpha members have devoted their time and energy to community service initiatives, including mobilizing for voter registration, mentoring local high school students and conducting school outreach programs on safe and responsible relationships and sex, and providing care and advocacy for elderly and vulnerable Alpha members and their families. “Greeks are involved all over campus,” explains Fowler. “I wanted to create a more inclusive home for people who look like me.”
Even before the pandemic, Stevens was a pioneer in online education at the graduate level, in 2020 ranking number 1 in NJ for Best Online MBA, Best Online Graduate Engineering and Best Online Graduate Computer Information Technology by U.S. News & World Report and in the top 10 nationwide for Computer Information Technology.

The Graduate Enterprise
Fueling the Technology Workforce and Developing the Innovations of the Future

Stevens’ nationally recognized graduate programs inspire, nurture and educate tomorrow’s leaders, equipping them with skills to analyze and solve complex real-world problems and fuel technological progress. Stevens’ interdisciplinary approach, strong collaboration with industry and government partners and premiere online offerings have contributed to a 272% increase in applications and a 73% increase in FTE graduate enrollment over the past decade and have attracted students and faculty from across the globe. Grounded in research and technology, Stevens’ master’s and Ph.D. programs prepare graduates for academic and professional roles with essential experience and competencies in business, science and engineering to solve complex challenges.
Groundbreaking Ideas Win International Business Challenge

Two weeks to change the trajectory of three existing biological companies. That was the assignment a team of Stevens School of Business graduate students took on at the 2021 virtual Global Scaling Challenge, where they were awarded the Grand Prize of $20,000. After placing first in two preliminary rounds, their championship winning strategy expanded the market for a company that remotely administers vaccines and medications to animals using targeted darts.

Going Green with Green Algae

It might look like green goo, but to Yanxia Lin, doctoral student in environmental engineering, it may be the “green” fuel that powers the next generation of cars and manufacturing plants. Lin’s research developing improved methods for producing oil-rich microalgae has already gained recognition, winning a prize at the 2018 Algae Biomass Summit. Her success in the lab convinced Lin to apply her expertise to help companies develop products and methods that will benefit people and the planet.

Al-Driven Methods for Better Medical Care

Doctoral student Louis Gomez is applying his interest in machine learning to improve clinical care. Working in the Health & AI Lab (HAIL) with Professor Samantha Kleinberg, Gomez tracks dozens of physiological signs in real-time from stroke patients in the ICU using AI to identify the causes of changes in their consciousness and predict them in advance. This could potentially lead to early interventions and better treatment decisions.

The Online Future of Master’s Programs

“I predict, [online learning] will capture a larger share of the higher education pie in the future, especially for students pursuing post-baccalaureate (master’s and graduate certificate) programs…it will evolve as a technology-enabled education, employing the power of artificial intelligence and machine learning to tailor instruction to the learning style and prior knowledge of each student, thus providing a far more customized student experience than many in-person programs.”

— President Nariman Farvardin as published in an op-ed in University Business, May 2021

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INSPIRING INNOVATORS AND INNOVATION
Growing an Outstanding Faculty in Both Size and Prestige

Faculty are the core of a great university, which is why Stevens has invested substantially in its world-class educators and researchers over the past decade. As the size and stature of the faculty have increased, so has the impact of their work — as teachers, mentors and pioneers who are advancing the frontiers of technology and inspiring the innovators of tomorrow.

Teachers, Mentors and Role Models

Dr. Antonia Zaferiou’s love of both dance and mechanical engineering inspired her study of movement mechanics and her interest in developing technologies and clinical interventions to improve athletic performance and everyday mobility and reduce the risk of injury, earning her an $822,200 National Science Foundation CAREER Award for her research. Her work in this field has allowed her to pursue another passion, mentoring students in STEAM (science, technology, engineering, art and math).

Dr. Alex Wellerstein has published extensively on the subject of nuclear weapons and is a “go-to” source for media. He and his collaborators, Drs. Kristyn Karl and Ashley Lytle, received grants from the Carnegie Corporation of New York and the MacArthur Foundation to fund and evaluate new tools for communicating nuclear threats to the public. As part of the project, various communications were tested at “The Bomb and You,” an exposition where participants experienced nuclear threats with the use of video games and live performances.

Dr. Jordan Suchow’s interest in cognitive science began at the intersection of technology and the mind. He develops computational models of individual and group perception, learning, memory and decision-making and applies them to the creation of new technologies. Suchow also designs tools to support behavioral and social science research, including a recent crowdsourcing system that easily combines human and machine decision processes.
38% increase in full-time faculty and lecturers since 2011

66% increase in tenured/tenure-track faculty

319 new faculty hired since 2011

69% increase in number of women faculty since 2012

The passion and drive of the Stevens community to make a difference is what drew Dr. Philip Odonkor to Stevens. He and his students pursue research that leverages big data to uncover hidden trends, patterns and correlations that can inform decision-making within smart cities to improve energy use, mobility and health.

Nurturing entrepreneurial talent is Dr. Mukund Iyengar’s mission. He is founder and director of the iSTEM@Stevens and Launchpad programs, incubators that transform student ideas into viable companies and which have launched several dozen businesses within the last five years. Iyengar spots talent, not by GPA scores, but through students’ love of building things and their commitment to a cause. The unique ecosystem he has created allows students to follow their passion, build products of the future and bring those products to market.

Dr. Dibs Sarkar’s leadership has advanced Stevens’ sustainability efforts. In addition to his research on understanding the behavior of environmental contaminants and prescribing the most appropriate “green” management, control and remediation technologies, he founded Stevens’ Sustainability Management Graduate Program, co-chairs Stevens’ Sustainability Committee, and in 2020, was appointed to the Advisory Council of the Association for Advancement of Sustainability in Higher Education (AASHE). Sarkar has also served three terms as Faculty Senate chair and, always inspired by Stevens students’ inquisitiveness and passion, has advised 45 graduate students and post-doctoral fellows over his 20-year academic career.
RESEARCH WITH IMPACT

Building a Safer, Smarter World

Stevens researchers are developing solutions that address critical national and global challenges and make a meaningful difference in people’s lives. In the areas of medicine, quantum technologies, computing, finance, energy and infrastructure, Stevens’ research faculty — in partnership with MIT, Stanford, Princeton, NASA, the National Cancer Institute and others — make advances through a range of projects, including:

- Leading-edge quantum technologies to illuminate robust data security, faster AI, more efficient communication and a new generation of devices
- Renewable energy research to innovate more efficient batteries, improved solar and wind technologies, and smarter power grids
- New imaging technologies to inform earlier, more intelligent cancer and neurological diagnosis, treatment and care
- Tools for visualizing and forecasting floods, storm surges and sea-level rise to help communities predict and prepare for climate change
- AI-powered technologies to detect lies, predict the likelihood of Alzheimer’s disease and depression, and warn of potential substance abuse
- Strong new building materials that resist fire and corrosion, remove pollutants from the environment and self-heal

Going Big in AI

Stevens has intensified its investment in artificial intelligence (AI) research and education through the Stevens Institute for Artificial Intelligence (SIAI). With 50 powerhouse faculty in all Stevens’ academic units, SIAI is growing into a center of multidisciplinary and collaborative research, learning and development. Its efforts focus on studying the technology’s impact on humans at the individual and societal levels and exploring how AI can support human needs.
Making Quantum Leaps

Super-fast quantum computers and communication devices could revolutionize numerous aspects of people’s lives. Physics professor and director of the Center for Quantum Science and Engineering Dr. Yuping Huang’s research is getting us closer to that reality. Huang and his faculty collaborators and research team developed a chip-based photon source 100 times more efficient than previously possible with the ultimate goal to make quantum devices so efficient and cheap to operate, they’ll be used in mainstream electronic devices. Huang is also the principal investigator of a team of Stevens researchers in quantum technologies and artificial intelligence that recently received a $7 million grant from the U.S. Army.

Building a Better Foundation with Stronger Materials

Concrete and cement are the foundations upon which structures have been built for centuries, but, as the deadly 2021 collapse of the Surfside, Florida, condominium complex devastatingly exposed, they are prone to cracking. Dr. Weina Meng, assistant professor of civil engineering, has devoted her career to designing better performing concretes and cements. With a $500,000 CAREER Award from the National Science Foundation, Meng is developing more resilient, sustainable and crack-resistant cements from a composite mimicking the architecture and chemical composition of natural mother-of-pearl or nacre — one of the strongest, yet most lightweight, biomaterials.

Visualizing Brain Disorders to Aid Diagnosis

Dr. Johannes Weickenmeier develops novel methods of modeling and visualization for brain and neurodegenerative disorders such as Alzheimer’s disease, ALS, Parkinson’s disease and dementia. His pioneering research — funded by multiple awards from the National Science Foundation and the National Institutes of Health and in collaboration with researchers at Stanford University, the University of California at Davis, Mount Sinai Health System and others — helps to vividly depict progression patterns by which diseases affect the brain, assisting clinicians with earlier diagnosis of brain and neurodegenerative disorders.

The True Costs of Human-Caused Sea Level Rise

Hurricane Sandy ravaged the Northeast almost a decade ago. Although climate change was considered as a contributor to its destruction, the cost of human-caused sea level rise associated with a coastal storm was, for the first-time, determined by research associate professor Dr. Philip Orton and his collaborators: the damage related to Sandy totaled $8.1 billion. For Orton, an expert in coastal flooding and climate change, the importance of this study is that the modeling used in the research can be applied to other storms and expose the immense financial toll of human-induced climate change, with the hope that doing so could increase the urgency to reduce it.
A DISTINCTIVE, TECHNOLOGY-INFUSED EDUCATION

Preparing Students to Innovate, Anticipate, Collaborate — and Thrive

No matter their course of study, all Stevens students benefit from an intensive, technology-infused curriculum, which gives graduates a distinct advantage in the workplace and prepares them to be successful in an ever-changing, technology-driven environment. Every undergraduate — regardless of major — is required to take at least one computer coding class, giving all students a technical edge. Innovation and entrepreneurship are integrated throughout the curriculum, culminating with senior design projects — many of which result in the creation of intellectual property or startup ventures. Experiential learning is also foundational to the Stevens educational approach, with enormous, career-shaping opportunities provided through internships, cooperative education and entrepreneurship and undergraduate research programs.
Where to Recharge? There’s An App for That

The number of electric vehicles (EV) on the roads has surged in recent years, but the availability of charging stations has not kept pace. Charging-up can also be costly. Mohammed Elmzaghi ’21 developed a mobile application to solve those problems as part of his studies at Stevens. “Owners of electric vehicles other than Tesla need to download about nine different apps for trip planning, finding charging stations, connecting and interacting with charging stations, plus many others. My app does it all,” said Elmzaghi. In addition to all those features, the Bauen Charge App also monitors battery status, begins the charging process when needed, and wirelessly schedules charging at the times of day when energy prices are lowest. Elmzaghi’s interests are both commercial and environmental. He hopes that by making EV charging easier, demand for both his app and electric vehicles will increase, thereby reducing carbon emissions.

Making Art More Expressive

Danielle McPhatter ’18 began her Stevens education with a desire to fuse her interests in music and technology. Honing her skills in music production, game design and computer science as part of the Music and Technology degree program — and expanding her thinking on the use of sound technology to create art — led her down an exciting career path. “The intersectionality of my education deeply informs my relationship with technology and its ability to augment the arts in emotionally connecting people,” said McPhatter. An internship with Nokia Bell Labs opened the door to her current position with the company in the Experiments in Art and Technology (E.A.T.) program, where she works with artists and Nokia engineers to enhance artistic expression through technology. One of her projects recently debuted at the Sundance Film Festival.

Unboxing the Beltway

What are the pressing issues members of Congress are communicating to their constituents and from what subjects are they staying clear? Dr. Lindsey Cormack, assistant professor of political science, analyzes vast quantities of data to answer these questions with the use of DCInbox, a web-based tool she developed that collects information from elected representatives’ official communications. In the classroom, she teaches her students to marry modern tools of analytics with more traditional political insights to gain a deeper and more accurate understanding of the political process. In 2020, Cormack and fellow political science professor Kristyn Karl held a friendly “Election Madness” competition between their classes to engage students in the complex nature of the American election process and the forecasting of results.
Students on a Winning Streak

Over the past decade, Stevens has expanded its undergraduate and graduate curricular offerings to align with emerging technology fields and meet industry demands.

Trending Programs

These programs are among the fastest growing and most popular at Stevens:

<table>
<thead>
<tr>
<th>GRADUATE</th>
<th>UNDERGRADUATE</th>
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<tbody>
<tr>
<td>- Computer Science</td>
<td>- Quantitative Finance</td>
</tr>
<tr>
<td>- Systems Engineering</td>
<td>- Computer Science</td>
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<tr>
<td>- Finance</td>
<td>- Cybersecurity</td>
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<tr>
<td>- Data Science</td>
<td>- Music and Technology</td>
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<tr>
<td>- Business Intelligence and Analytics</td>
<td>- Computer Engineering</td>
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<tr>
<td>- Construction Engineering and Management</td>
<td>- Finance</td>
</tr>
<tr>
<td>- Machine Learning</td>
<td>- Software Engineering</td>
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Computer science major Ben Mirtchouk ’21, bested 130,000 competitors to win top prize at the 2021 TCS CodeVita challenge, a 2021 Guinness World Record for the largest-ever international coding competition.

Nicholas Cali ’23 and Zachary Marvin ’24 took home top honors in the 2021 National Security Innovation Network’s accelerated learning program, receiving $25,000 from the Department of Defense to develop their DroneHQ object detection technology into a viable business for both military and civilian use.

A team of Stevens’ computer science and cybersecurity students won first place at the prestigious National Security Agency-sponsored 2018 Penn State Cybersecurity Competition.

Six undergraduates in the quantitative finance program scored a top-3 finish in CNBC’s 2018 Stock Draft, making their television debut as the only university team invited to compete.
Showcasing Innovation
Each year, Stevens’ students showcase their senior design projects at the Innovation Expo. They are also invited to compete in the Ansary Entrepreneurship Competition, a high-stakes pitch contest to persuade prospective investors to help them turn their project into a successful business. The 2021 first-place prize of $10,000 was awarded to Faizah Chowdhury and Jake Fiore for their Hip Tip pitch, a tool combining an intraoperative scanner and analysis software to aid surgeons in determining the best implant size for hip replacements, avoiding failed procedures that result in the need for revision surgery.

Graduate Programs for Tomorrow’s Leaders
The number of graduate programs offered at Stevens has strategically increased since 2011, with more than 56 master’s degree programs, 22 Ph.D. programs and over 100 graduate certificates now available to students. The degree programs have expanded to meet the changing needs and challenges of business and society. Highlights include:

- **Master of Science in Business Intelligence & Analytics** blends analytical and professional skills to prepare students for a data-driven business environment.
- **The Master’s in Applied Artificial Intelligence program** is one of the first graduate programs in the country to explore AI applications for engineering. It provides students with a blend of software and hardware skills that can be used across multiple engineering domains.
- **The Master of Science in Data Science** program prepares students for careers in data-rich workplace environments requiring strong skills in data analysis and presentation.
- **Master’s in Machine Learning** is among the top ten “Best Online Graduate Computer Information Technology Programs,” according to U.S. News & World Report. The program provides students with a thorough understanding of deep learning theory and a solid footing in the most important machine learning paradigms.
- **Sports Technologies and Digital Transformation Dual Master’s Program**, offered in partnership with Real Madrid Graduate School-Universidad Europea, prepares students for a career in the increasing technology-driven sports field by gaining proficiencies in data analysis, virtual reality, blockchain and geolocation.
Strengthening a Commitment

Enriching Campus Life and Learning, Advancing Diversity and Inclusion

Stevens has created — and continues to build — a vibrant, multicultural and connected intellectual and social community. Students from 42 states and 33 countries across the globe contribute profoundly to campus life. Even more significant, since 2011, the number of women undergraduates has increased 98% and the number of underrepresented minority students has increased 149%. The university’s efforts extend beyond enrollment. Signature programs, initiatives and places enhance diversity and provide a welcoming and supportive environment that nurtures students’ academic and personal growth and enhances the overall community.

Women Blazing Trails

Stevens admitted its first female students in 1971 and continues to support women in all aspects of STEM. Women now make up 30% of the undergraduate population and thrive at Stevens as influential student leaders and mentors, outstanding athletes, accomplished scholars and strong contributors to student organizations who go on to be trailblazers in their fields and communities.

While they are at Stevens, the Lore-El Center — a vibrant living and learning environment — serves as a hub of campus life for women at Stevens. The center promotes empowerment through shared residential experiences, mentorship, programs and events such as the biennial LeadHERship Conference and Trailblazer speaker, the Week of Women, the Lore-El Lunch & Learn series and a variety of service activities.

Space of One’s Own

Stevens’ diversity and inclusion efforts are bolstered by the addition of new spaces and programs, including:

- The Intercultural Space: for dialogue, identity and leadership development, and creative programming on the intersections of social identities and cultures on campus.
- The Quiet Space: for meditation, prayer and quiet reflection, open all day, every day.
- Stevens Safe Zone Ally Program: for community education on LGBTQ+ identity and justice issues, and public advocacy of its members.
Building Bridges

Stevens has a robust ecosystem of programs to expand access, opportunity and support for underrepresented minority students — even before they are officially Stevens students.

Through Stevens ACES (Accessing Careers in Engineering and Science), the university partners with high schools in underserved communities to provide educational support for students, school counselors and STEM teachers, as well as scholarships for students to attend Stevens’ summer pre-college programs. ACES students who go on to pursue a degree at Stevens continue to receive both academic and financial assistance. The program received the 2019 Innovation in Education Award from the NJ Tech Council, as well as the New Jersey Business and Industry Association’s 2020 Diversity and Inclusion Award.

The Stevens Technical Enrichment Program (STEP) includes a summer bridge program for high school seniors making the transition to their first year of college, as well as academic support, peer tutoring, counseling, advising, career workshops, mentoring, networking and social events for students who go on to study at Stevens.

Made possible by a grant from the A. James and Alice B. Clark Foundation, the A. James Clark Scholars Program supports outstanding students who aspire to make a difference in their communities and society. In addition to tuition support, the Clark Scholars program provides access to and funding for service activities, business courses, leadership training, one-on-one mentorship, enrichment seminars, and research and study abroad experiences.

Turning Theory into Practice

A university-wide focus on building a diverse and welcoming community is strengthened through partnerships and external recognition, including:

- The American Society for Engineering Education (ASEE) recognized Stevens with a Bronze Award in its inaugural ASEE Diversity Recognition program for making significant progress in increasing diversity, inclusion and outcomes.

- In 2020, Stevens joined the ASPIRE Alliance Institutional Change Network, aimed at ensuring all STEM faculty use inclusive teaching practices and institutions increase the diversity of their STEM faculty.

- A National Science Foundation grant helped increase awareness of unintentional bias that limits the full participation of female faculty in the academic sciences and implement best practices, programs and policies to reduce barriers for success.

A World of Ideas — On and Off Campus

From study abroad opportunities to on-campus lectures, Stevens provides its community with opportunities to broaden their life and work. Study abroad experiences are critical to exposing Stevens students to different ideas and approaches.

“I met such an interesting, dynamic group of people from so many different walks of life, and we did fascinating research,” reflects Townsend Morey ’21, a naval engineering student who studied in Svalbard, Norway.

Back on campus, the university hosts several lecture series exploring fascinating ideas and issues.

At the Excellence Through Diversity Lecture Series, Hidden Figures author Margot Lee Shetterly spoke of how the story of the heroic — and then-unrecognized — Black women of NASA parallels the current injustices and inequalities brought to the forefront during the pandemic.

The President’s Distinguished Lecture Series seeks to spur discussion on technology’s impact on society. Recent talks were given by Former NSA Director Michael Hayden, Google Director of Research Peter Norvig and PSEG Chairman, President and CEO Ralph Izzo, whose topics included security, AI and climate change.

As part of the President’s Special Lecture on Pandemics, Yale University Professor of History and the History of Medicine Frank Snowden discussed why the world was so unprepared for COVID-19 and what it would take to prepare for a future pandemic.
Tackling Industry Problems in Fintech

Industry problems lie at the heart of the nation’s first Industry-University Cooperative Research Center (IUCRC) focused on fintech. Established in 2021 through a grant from the prestigious National Science Foundation IUCRC program, Stevens is partnering with Rensselaer Polytechnic Institute to launch the Center for Research toward Advancing Financial Technologies (CRAFT). The center will work with corporate members to become more agile, solve increasingly complex problems and seek advantages through integration of new technologies such as artificial intelligence, automated markets, more robust algorithms and smarter fraud detection. To date, major players such as Goldman Sachs, Bank of America, UBS, IBM, T. Rowe Price, Wells Fargo, among others, including the New Jersey Economic Development Authority, have pledged to join the membership.

PARTNERSHIPS AMPLIFY IMPACT

Meeting real-world challenges through collaboration

Symbiotic collaborations benefit Stevens’ partners in multi-faceted ways. Over the past decade, Stevens has forged new and strengthened enduring partnerships with industry, government and other organizations in New Jersey, the region and around the globe. These partnerships provide technology talent to the region’s STEM-based innovation workforce, deliver advanced research targeted to industry needs and create opportunities for students and researchers to solve real-world problems.

“The relationship between Stevens and PSEG is mature and continues to grow. Our partnership is an example of how industries and universities can work together to advance one another’s missions.”

› Ralph Izzo, PSEG Chairman, President and CEO
Global Partnerships’ Extended Reach

Technology and business are global and interconnected, and these characteristics are intentionally integrated into the Stevens curriculum. Stevens has forged numerous international partnerships with universities around the world. One such relationship, with Real Madrid Graduate School–Universidad Europea, recently produced a new accelerated Dual Master’s in Sports Technologies with Real Madrid Graduate School, which provides students with practical knowledge of and in-depth proficiency with the latest technologies utilized in the sports industry. The innovative program includes an immersive internship experience and opportunities to engage with Europe’s prestigious Real Madrid CF soccer club.

Continuous Learning for Corporate Partners

As technology changes the nature of work, companies must be agile and forward-thinking. The pharmaceutical firm Pfizer recognized a need to broaden the technical expertise and business planning of its management team, so it selected Stevens to offer a new program of corporate education due to the university’s technology orientation and its ability to tailor curricula to industry partner needs. The outcome is a multi-year partnership that has enrolled more than 100 Pfizer associates in Stevens’ graduate certificate programs to date. Other corporate partners that have chosen Stevens for workforce education include Accenture, JPMorgan Chase, L3Harris, Langan Engineering, NAVAIR, and Verizon.

A Multidimensional and Mutually Beneficial Partnership

PSEG was one of the first supporters of Stevens’ programs to increase STEM education access to diverse and underserved students through its pre-college programs, the Stevens Technical Enrichment Program and Stevens ACES (Accessing Careers in Engineering and Science). PSEG also made a pivotal contribution to the SU+RE House, a student-built home that placed first in a national Solar Decathlon for energy-efficient housing. And with a $1.5 million grant, PSEG supported research in energy conversion and storage. “Companies like ours will look to the next generation of innovators to help with issues such as climate change and energy independence,” said Ralph Izzo, PSEG’s chairman, president and CEO, who delivered the 2020 Stevens President’s Distinguished Lecture. “That requires people with knowledge, curiosity and creativity.”

Game-Changing Research

Stevens plays an important role in advancing the region’s research enterprise — from powerful long-term collaborations to an innovative student-focused fellowship program. Stevens’ long and growing research relationship with the Department of Defense’s Picatinny Arsenal fuels collaborative research programs in diverse areas including biofuels, healthcare, quantum technologies, artificial intelligence, environmental technologies and advanced design and manufacturing methods, all critical to a nation’s more secure future. And through Stevens’ Artificial Intelligence Research Summer Fellowship Program, NEC Labs sponsored innovative research and empowered Stevens’ undergraduate students to see how humans and AI systems can work closely in concert to achieve valuable outcomes. These are only a few examples of how partners can make a difference by sponsoring research at Stevens.

Fueling the Talent Pipeline

When L3Harris, a global aerospace and defense technology innovator with more than 47,000 employees, needed talent to support its growing presence in New Jersey, the company looked to Stevens. Now L3Harris is one of the top recruiters of Stevens’ graduates. At the same time, the company partners with Stevens to provide on-site graduate-level classes and advanced-degree programs in systems engineering to their employees. L3Harris’ collaboration with Stevens extends further, into the areas of mentorship and philanthropy. The company has sponsored senior design projects and has provided funds to support both the Stevens Technical Enrichment Program and the university’s Lore-El Center for Women’s Leadership.
DESIGNING THEIR OWN PATHS

Extracurricular Experiences Shape Student Success

With more than 100 student clubs and organizations, 25 varsity sports, 24 intramural and club sports and numerous spontaneous and planned activities, Stevens students have limitless opportunities to pursue their passions outside the classroom. When COVID-19 forced a transition to remote living and learning, Stevens students showed their ingenuity, creativity and resilience, by performing holiday concerts on Zoom, developing apps to accelerate the process of securing a vaccine, volunteering in their local community as first-responders and many other activities.

Prowess in Athletics and Academics

Stevens’ scholar-athletes excel on the field and in the classroom:

- Athletes earned an extraordinary 3.8 overall grade-point average for the 2020-2021 academic year
- 9 students named Academic All-Americans during the 2019-2020 academic year, setting a new Stevens record
- 14 individual and team NCAA championships over the past decade
- Scholar-athletes play an active role in campus life, with many serving in leadership roles within student organizations.
Going the Distance

Amy Regan ’17 captured six national championships for cross-country and track during her time at Stevens as she pursued her engineering management degree. Capping off her illustrious athletic career, Regan qualified to compete in the 2020 U.S. Olympic Team marathon trials. She said, “It’s the culmination of my collegiate career,” noting that running has been the backbone of her life. Regan landed a job on the Engineering Business Development team at Garmin International, with her marathon training sessions useful for testing the newest Garmin running watches. Regan credits Stevens with providing opportunities that enabled her to accomplish both her athletic and professional goals. Regan believes “no other university could have done that.”

Running Away with Honors

Fueled by the support of coaches and her teammates, Stevens Athletics track star Gina Dello Russo ’20 M.E. ’20 has shattered Stevens records in multiple track events while racking up academic achievements as a Pinnacle Scholar studying mechanical engineering. Over her athletic career, she won 25 MAC and Empire 8 individual championships and topped the entire Division III field in the 400-meter dash final in 2020, becoming Stevens’ eighth-ever NCAA champion athlete. While posting those wins, Dello Russo achieved a 3.94 undergraduate GPA and a 4.0 GPA as a master’s student in engineering management. Dello Russo’s exceptional focus and determination continue on and off the track as a Stevens Ph.D. student researching complex sustainable-energy markets.

Volunteerism is in Stevens’ DNA

Building a Better COVID-19 Vaccine Locator Website

In the early days of COVID-19 vaccine availability, Maor Mashiach ’23 found the process of securing a vaccine appointment incredibly frustrating. But unlike most, he had the skills to do something about it. Mashiach, a computer science student, thought if he had problems, then people less technologically skilled would likely just give up. To help increase vaccination rates in New Jersey, Mashiach spent 300 hours during winter break building a COVID-19 testing and vaccine locator website that — with the simple input of a person’s ZIP Code — provided users a real-time map of all testing and vaccine locations within a 40-mile radius, as well as contact and pertinent information, including driving instructions to the site.

3D Printing to Protect Frontline Workers

At the beginning of the pandemic, chemical engineering student Dominic Dell Antonia ’21 realized he could make an immediate difference, using his technical skills and the equipment he had acquired in his side business repairing 3D printers. With the help of 11 3D printers located in the basement of his grandparents’ house, Dominic produced more than 1,600 medical face shields, which he donated to frontline healthcare workers. Dominic was recognized by Newsweek as a “Hero of the Pandemic.”

Giving Shelter to the Homeless

A team of Stevens students used their senior design project to help stop homelessness by volunteering their skills and time to The Hoboken Shelter, an organization providing housing for 50 overnight guests, providing 500 meals a day and offering programs aimed at life skills and enrichment. To further these efforts, the students developed a 5-year strategic plan that included bold goals and strategies in a number of vital areas, based on intensive research and extensive interactions with key stakeholders. Taking up the mantle, a senior design team last year continued the work of their fellow students, but with a particular focus on fundraising. Launching a social media campaign and live event, the team raised $3,000 for the shelter.
Sustainability In All We Do

Stevens is investing in a greener future by sourcing 100% of its electricity directly from a regional renewable energy source beginning fall 2021, one of the few universities to do so.

Awards and recognition earned for its sustainability initiatives:

- **STARS Gold rating** from the Association for the Advancement of Sustainability in Higher Education (AASHE) for outstanding sustainability achievements in 2020.
- **2021 U.S. Green Building Council (USGBC) Regional Leadership** award for exceptional sustainability of design for Stevens’ LEED GOLD Gateway Academic Center.

Resilient enough to withstand hurricane-force winds and flooding, the net-zero energy **SU+RE HOUSE** was designed and built by an interdisciplinary team of Stevens students and faculty and earned top honors at the 2015 Department of Energy Solar Decathlon.

CREATING A CAMPUS FOR THE FUTURE

Utilizing Technology to Enhance and Expand Campus Life

Over the past decade, Stevens has revitalized its physical and technology infrastructure, creating learning and research spaces that catalyze interdisciplinary collaboration, state-of-the-art laboratories that inspire and facilitate pioneering research and development, and modern residential and social spaces for students to live and grow. The university has also heavily invested in a sustainable campus for the future, earning national recognition and awards for its green initiatives.

Technology is at the core of the Stevens experience and environment. From a major campus-wide wireless upgrade to a cloud-smart initiative, to the recent deployment of Workday Student, which enables students to seamlessly manage their academic progress online from enrollment to graduation, Stevens is utilizing technology to enhance the student experience and increase efficiency.
Hanlon Financial Systems Center
Founded as a naval engineering and maritime research facility, the Davidson Laboratory is home to the American Bureau of Shipping Engineering Center, providing expanded teaching and research capabilities in key areas of engineering, design and homeland security.

American Bureau of Shipping Engineering Center
The Hanlon Financial Systems Center consists of two cutting-edge laboratory facilities complete with Bloomberg terminals, data visualization screens, trading desks and stock ticker-tape displays to create the Wall Street environment that has advanced Stevens’ strength and visibility in the fields of Quantitative Finance and FinTech.

University Center Complex
Opening in spring 2022 and featuring spectacular Manhattan views, this iconic building will house fitness facilities, student club and organization space, conference rooms, dining and a C-store and accommodate approximately 1,000 student residents.

Burchard, McLean & EAS
Renovated labs and classrooms in the Burchard Building and McLean and Edwin A. Stevens Halls are premiere spaces for students to learn and innovate.

Student Wellness Center
The Student Wellness Center, which opened in 2019, is a one-stop facility providing student health services, counseling and psychological services and disability support services under one roof.

American Bureau of Shipping Engineering Center
The Hanlon Financial Systems Center consists of two cutting-edge laboratory facilities complete with Bloomberg terminals, data visualization screens, trading desks and stock ticker-tape displays to create the Wall Street environment that has advanced Stevens’ strength and visibility in the fields of Quantitative Finance and FinTech.

Ruesterholz Admissions Center
Formerly known as Colonial House, the Ruesterholz Admissions Center makes a dramatic first impression on prospective students with its modern and welcoming interior and magnificent views of the New York skyline.

Gateway Academic Center
The Gateway Academic Center, which opened in 2019, is a $68 million, 89,500-square-foot, state-of-the-art teaching and research facility that earned LEED Gold certification for exceptional sustainability in design, materials and construction.

MakerCenter
The newly launched MakerCenter is where Stevens students do what they love: make things. Additions to the center include the Quantum Space for developing and testing quantum devices and the MakerSpace, which provides tools and equipment for prototype development.
THE POWER OF STEVENS
Alumni and Friends Fuel Success of Record-Setting Campaign

Powering the successful and most ambitious fundraising campaign in university history are the thousands of alumni and friends who have engaged with and invested in Stevens with unprecedented generosity — of spirit, time and treasure. Members of the Board of Trustees contributed $72 million towards this $200 million goal. Raising over $200 million from more than 14,000 individual donors who made over 45,000 distinct gifts, The Power of Stevens campaign has supported numerous new initiatives. These efforts include scholarships and programs to propel student success, the recruitment of world-class faculty and an expanded and revitalized campus, including new academic, research and student spaces.

“The Power of Stevens campaign has been an example of alumni making a direct impact, investing in a legacy for generations of Stevens students to come by improving our campus and making available more resources to our faculty and students, such as scholarships at all levels.”

Victoria Velasco ’04, Alumni Trustee and President of the Stevens Alumni Association

“Stevens is undoubtedly a university on the rise. These new facilities provide the state-of-the-art classrooms, lecture halls, meeting places and laboratories that are so instrumental to delivering the outstanding student outcomes we desire.”

John Dearborn ’79 M.Eng. ’81, Stevens Trustee and Co-Chair of The Power of Stevens campaign

The Power of Stevens $200M campaign raised:

- $200M+ total campaign gifts and pledges
- 14,362 campaign donors
- 46,446 campaign gifts
- $126M raised
- 158 new scholarships established
- 37 new labs and classrooms
- $47M raised
- 18 new named chairs and fellowships
- $27M raised

Student Success
Vibrant Campus
Faculty Excellence
Faculty Excellence

Endowed chairs and fellowships have enabled Stevens to recruit and retain world-class, trailblazing researchers and outstanding teachers who inspire students and advance the frontiers of science, engineering, technology, business and the humanities and social sciences.

- The endowed Richard R. Roscitt Chair in Leadership was the perfect vehicle to recruit Dr. Wei Zheng, associate professor in the School of Business, whose academic and research focus is at the intersection of leadership and diversity. The position is a dream role for Zheng, providing a launchpad for her research on how leaders can foster inclusiveness and innovation and her interest in expanding leadership education at Stevens and in the business community.

Student Success

Philanthropic support from alumni, friends, corporations and foundations provides students with access to life-changing opportunities — from scholarships and academic support to innovative new programs.

- With support from the Lawrence T. Babbio ’66 Pinnacle Scholars Program, Katie Van Orden ’20 spent her summer at Stevens’ Sensorimotor Control Lab, an opportunity that led to her multi-year research project, designing and 3D printing a complex hand prosthetic with individually controlled motor-driven fingers. As a Pinnacle Scholar, Van Orden attended Nariman Farvardin’s President’s Leadership Seminar with successful entrepreneurs, business leaders and other luminaries. Those experiences prepared her well for biomedical engineering work at medical device firms Zimmer Biomet and Ethicon as part of Stevens’ Cooperative Education program.

A Vibrant Campus

With generous support from alumni and friends, the Stevens campus has been transformed into a state-of-the-art environment for teaching, research, learning and living.

- Alumnus Richard F. Harries ’58 and his wife, Carol, contributed the largest gift in Stevens’ history as part of The Power of Stevens campaign. Those funds, along with many other generous donor contributions, have supported the construction of the new University Center Complex. This iconic building will provide nearly 1,000 student residents exceptional living and studying spaces, expanded meeting and conference room areas, as well as stunning views of the New York City skyline.
A BRIGHT FUTURE AHEAD

Sound Fiscal Management Positions Stevens Well for the Next Decade and Beyond

The past decade has presented unprecedented disruption and many unforeseen challenges to institutions of higher education in the U.S., including, most recently and notably, the global coronavirus pandemic. During this past decade of turmoil, Stevens has remained laser-focused on achieving the strategic plan goal to strengthen the university’s financial profile. This has been achieved through prudent financial planning, rigorous fiscal discipline and the generosity of alumni and friends in surpassing the $200 million goal of The Power of Stevens campaign. These actions have combined to put Stevens on firm footing for the next decade and beyond, through the attraction of stellar new faculty, the addition of significant student scholarships, the creation of magnificent living and learning spaces and more. This foundation puts Stevens on firm footing for the next decade and beyond.
“I am enormously proud of Stevens’ ascent during the past decade. From the quality and diversity of our students to the caliber of our faculty and researchers, to the world-class facilities we have created, Stevens has made transformational progress since 2011. This progress is due, in large part, to sound management practices, rigorous fiscal discipline and the engagement and generosity of alumni and friends. Taken together, these achievements put Stevens in an exceptionally strong position for the future.”

Stephen T. Boswell C.E. ’89, Ph.D. ’91, Hon. D.Eng. ’13, Chairman of the Stevens Board of Trustees
LOOKING FORWARD

“Stevens has a special place in our region and in our society.

We are agile. We are technology-centric. We are in the heart of one of the most vibrant corporate and technology centers in the world. And we are tackling some of the most important and challenging problems of our time — in healthcare and medicine, brain research, artificial intelligence, cybersecurity, robotics, quantum devices, financial technologies, renewable energy, sustainability, defense and security and more.

The university’s progress of the past decade is nothing short of remarkable. With this foundation in place, the university is poised in the years ahead to make consequential contributions that materially improve the lives and future of our region, our nation and our global community.

Stevens is a university on the rise, and the best is yet to come.”

N. Farvardin

Nariman Farvardin, President