



STRATEGIC PLAN 2024–2029

Innovate, Sustain, Thrive: Building the INI of Tomorrow



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Director's Message

The Information Networking Institute (INI) was created in response to a need in the industry and continues to adapt to the evolving market. The late 1980's was more than big hair and bright patterns — it was our first glimpse into how the internet would come to shape our future. Our small, fledgling program began with a handful of computer scientists and communications engineers looking to better understand how their work relies on one another.

Despite some initial challenges, the INI persisted, attracting world-class applicants, recruiting dedicated faculty and cultivating a community rooted in innovation, wellness and resilience. This curriculum, tailored to the unique needs of the INI students, helped fill a gap most organizations weren't even aware of yet, establishing our alumni as coveted innovators, thought leaders and change makers.

These characteristics are integral to the INI ethos, producing graduates who readily translate between mediums and come equipped with business acumen and critical policy insights. We're not just setting a standard for engineering education; we're the leading example of why agility and advancement move along parallel paths, ensuring sustainable growth in a rapidly changing environment.

As the director of Carnegie Mellon University's Information Networking Institute (INI), I am extremely proud of our ability to pivot quickly and address emerging challenges. In our 2016–2021 Strategic Plan, we prioritized improving the INI student journey, but we couldn't have anticipated the impact a global pandemic would have on our mission. Despite the unprecedented challenges, we maintained a flourishing remote learning environment, bolstered by nearly 20 years of innovative delivery models. As the pandemic subsided, our faculty and staff adapted to accommodate the needs of the largest cohort in the INI's history.

Our community's resilience has proved to be a key factor in our success. As an organization, we value our people — our faculty, staff, alumni and students who have been and remain, our greatest asset.

This hallmark characteristic is what has kept the INI strong and enabled us to stay resilient in the face of geopolitical risks and workforce impacts. These external factors have also demonstrated the need for us to prioritize the well-being of our community, while exploring new opportunities and initiatives to broaden our current student population.

The INI has anticipated recent upheavals in the market and is prepared with proactive strategies to best serve our community. We're confident in our ability to broaden our reach, attract new talent and enhance the student experience.

Dr. Dena Haritos Tsamitis

*Barbara Lazarus Professor in Information Networking
Director, Information Networking Institute (INI)
Founding Director, Education, Training and Outreach, CyLab*



A Reputation of Resilience

1989

The INI is founded by Marvin Sirbu. Alex Hills, the first director of the INI, created the first Wi-Fi campus network.



2000

The INI officially becomes a part of the College of Engineering.

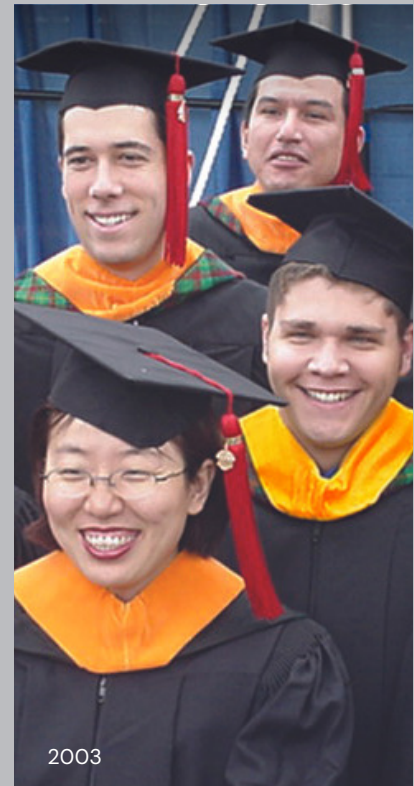


2002

The INI establishes CMU's first international degree program in Athens, Greece.

2003

The INI creates one of the first cybersecurity degree programs in the nation.



2005

Women@INI is established and the Kobe MSIT-IS program is launched in Japan.



2007

The INI launches two graduate degree programs in Portugal (Aveiro MSIN and Lisbon MSIT-IS).

2008

The INI launches bicoastal programs at CMU in Silicon Valley, giving students the best of both worlds. First cohort of Rwandan students are welcomed to CMU-SV.



2011

The peer mentorship program Don't Struggle Like I Did (DSLID) is established to help new students transition to the INI.

2014

The INI begins hiring full-time teaching faculty.



2022

The INI launches an MSAIE-IS program that prepares students for careers that navigate the intersection of information security and artificial intelligence (AI).

Vision

Our graduates are driving innovation and having a positive impact on the world.

Mission

We design and deliver exceptional, world-class engineering master's degree programs and transformative learning experiences enriched with diverse perspectives.

The INI equips our graduates with distinct interdisciplinary knowledge and skills that set them apart from their peers.





Values



Interdisciplinarity

We empower the next generation of leaders through programs developed by our world-class faculty who bring a rich set of perspectives and experiences from across disciplines. The INI curriculum is complemented by meta-curricular activities to offer a framework for students to create their own paths.

Innovation

We evolve and adapt as our changing world demands by giving our faculty, students and staff the resources to investigate, the freedom to experiment and the encouragement to excel. As an organization, we are always innovating, adapting our curriculum and co-curricular activities to maintain relevance amidst rapid change.

Resilience

As we near the INI's 35th anniversary, we're proud to reflect on the ways we've grown. Our network of changemakers and collaborators has been our driving force in ensuring the success of our students, faculty and alumni. Our adaptability has solidified our place as a leader in education innovation.

Inclusivity

Our people are our greatest asset. We provide a welcoming culture that cultivates inclusivity and values a diversity of opinions, intellectual perspectives and life experiences from all people while celebrating their ethnic origin, race, religion, gender, age, physical ability, sexual orientation, self-identity and neurodiversity. Members of the INI community value, respect and trust one another, as evidenced by what we say and, more importantly, by what we do.

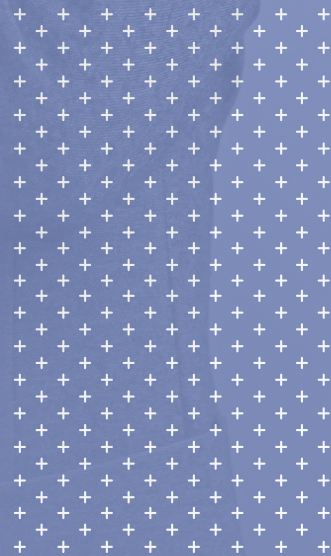
Wellness

We encourage our staff, faculty and students to prioritize their physical and mental health. By attending to our well-being, we show up with a full cup, primed and ready to be of service to others.

Goal 1

Build a Flourishing Faculty Organization

The INI's mission is to provide an exceptional, transformative learning experience. Building a thriving faculty organization is crucial to achieve this. The INI recruits passionate educators devoted to mentoring the next generation of industry-leading innovators. Over the last decade, students have prospered under faculty who are well equipped to tailor their courses to match the unique needs of our students and curriculum. This enables the INI faculty to ensure their students have a solid foundation to succeed in future classes.



STRATEGY 1.1

Foster a faculty culture of support, engagement and career satisfaction that reinforces a high quality of life.

We harness the unique expertise and dedication of our faculty, while simultaneously nurturing their career satisfaction and quality of life.

We empower the faculty to explore new teaching opportunities that align with their industry knowledge and domain expertise. We encourage faculty to participate in workshops, attend conferences and become members of professional organizations. Through these leadership experiences, our faculty introduce and drive initiatives that enhance the value of the INI curriculum and provide students with keen insights into their fields of study. By fostering connections with industry experts, the INI faculty bring real-world relevance to our curriculum to shape and evolve the educational landscape through their experiences and intellect.

Our goal is for the INI faculty to feel motivated, engaged and fulfilled in their roles as educators so that they inspire and impassion our students.



STRATEGY 1.2

Provide faculty with the space to make meaningful contributions and shape critical academic processes.

Our faculty members are vital to our identity and purpose. They play a critical role in every aspect of the student journey, providing valuable insights and active participation. By helping to shape our academic processes, our faculty members have a vested interest in ensuring the success of every INI student.

STRATEGY 1.3

Build a resilient and sustainable faculty organization by examining and responding to the needs of the INI students as the landscape evolves.

The INI has established a faculty organization that is adaptable and responsive to the evolving needs of our student body. We encourage a collaborative atmosphere that is intrinsically tied to our commitment to mentorship and support. Faculty regularly share best practices and guidance with new faculty members as they navigate their roles.

Our faculty organization is prepared to adapt and pivot when we need to respond to the ever-changing needs of our students. We explore how these needs may evolve over time, taking into consideration external forces that have an impact on our industry.

Goal 2

Engage New Audiences While Enhancing the Student Experience

As a pioneer in world-class graduate education, we embrace a market-driven approach that accelerates innovation. We are creating initiatives that serve new audiences and provide a transformative learning experience for all.



STRATEGY 2.1

Foster a culture of innovation by providing students with opportunities to engage with entrepreneurs and industry partners.

We will continue to strengthen our deep relationships with the startup community and venture capitalists, many of whom are alumni. By leveraging our network, we foster entrepreneurialism and professional development opportunities for our students. We will infuse these opportunities directly into the CMU-SV experience by launching the newly developed Technical Entrepreneurship Coaching Hub (TECH) Fellowship program, an immersive curriculum that engages students in our bicoastal programs through hands-on startup experiences and entrepreneurship coursework.

STRATEGY 2.2

Generate additional revenue streams through new programs.

The pandemic has taught us valuable lessons on the significance of maintaining financial stability and adapting to changes in the world. It is crucial to have additional revenue streams that enable us to reach new audiences without adding pressure to our faculty.

To achieve this, we will collaborate with strategic partners, leveraging our strong alumni network and industry relationships. Our ideal partners will benefit from the INI's expertise while enhancing the student experience and aligning with our faculty's current capacity.

STRATEGY 2.3

Attract students with diverse perspectives and life experiences that will enrich the INI academic environment and community.

The INI is dedicated to attracting, enrolling and supporting a diverse cohort of each incoming class. Our holistic admissions approach evaluates the whole student, identifying compelling candidates who excel beyond traditional academics.

The INI's bridge program is being created to increase and diversify the pool of admissible candidates to our existing master's opportunities. Upon successful completion of the program, students will be prepared for the next step in their careers. The flexible program captures the attention of underserved populations and gives qualified candidates the technical expertise they need to become successful cybersecurity professionals.

The INI aims to support promising candidates, cultivating a network of visionaries who utilize their unique skills to maintain thought leadership and drive strategic change.

STRATEGY 2.4

Enhance the INI community and culture by creating a pipeline of domestic students.

To maintain a diverse and inclusive learning environment, we aim to attract international and domestic students to our programs. At present, our goal is to increase the flow of domestic applicants, strengthening our relationship with feeder schools that have strong technical programs. Our recruitment strategy includes events, conferences, online engagements and other opportunities to connect with niche markets within the US. The INI will also focus on partnerships with minority-serving institutions, including Historically Black and Hispanic Colleges and Universities (HBCUs), Hispanic Serving Institutions (HSIs) and women's colleges.

Our industry and government partnerships provide opportunities for domestic students to enter the cybersecurity workforce and help protect our nation. We sustain close relationships with our global alumni network that includes contacts at influential companies across industries. By continuing the Department of Defense Cyber Scholarship Program (DoD CySP) and expanding our National Science Foundation CyberCorps Scholarship for Service (SFS) program, we are aiding students through scholarship and career opportunities while simultaneously filling a crucial need for the country.



Interdisciplinarity. Innovation. Resilience. Inclusivity. Wellness.



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