

ILLINOIS TECH MAGAZINE

Spring 2024



Legacy Builder

Jimmy Akintonde (ARCH '95)
transforms conventional
development

Trusting AIs Under Fire
Can a Phone Change Humanity?
Face to Face and Fearless



A Letter from Raj Echambadi

Innovations often start small. But with the right amount of support, mentorship, and fortitude, our fledgling ideas can grow to become astounding endeavors. And those endeavors, in turn, will inspire others to follow.

As I read about the continued accomplishments of our alumni, I am always profoundly inspired by Illinois Institute of Technology's legacy as an institution that inspires and supports its learners to do great things.

We have recently achieved some remarkable milestones on this journey.

This spring, in partnership with Chicago Public Schools and City Colleges of Chicago, we announced the launch of the Runway 606 initiative, which aims to dramatically expand STEM pathways for CPS students and

reduce their path from high school to a master's degree by up to two years. This is the next step in our continued effort to live up to our founding mission to create opportunities for learners from all backgrounds.

And when it comes to opportunities for our students and alumni, I am proud to say that we have continued to grow through even more strategic partnerships. In pursuit of sustainability, Illinois Tech is a member of Great Lakes ReNEW, a six-state collaboration that was recently awarded up to \$160 million from the National Science Foundation to build a Great Lakes-based water-focused innovation engine.

Additionally, we are investing to spark even more research and innovation in the future. In late 2023

we leased more than 34,000 square feet of cutting-edge wet lab facilities in Chicago's growing life science innovation district, in a facility that also houses Portal Innovations and the Chan Zuckerberg BioHub. We are the first academic institution to join this space.

I now invite you to read about some of your fellow alumni whose vision, drive, and accomplishments will likely impress you as much as they did me.

Martha Razo's (AMAT, M.S. '17) embrace of her family's industrial business caused it to flourish where countless others failed. Her secret: to modernize, pivot, and talk with all new clients face-to-face. Jimmy Akintonde's (ARCH '95) development company grew from an office barely big enough for a second employee to a space enough for 150 employees, and it is now part of a team tackling the Barack Obama Presidential Center on Chicago's South Side. Kaiwei Tang (M.B.A. '06, M.DES. '14) had a vision for a new type of smartphone—one stripped of the distractions that have caused so much national debate regarding their usefulness for children—and it has placed him far ahead of his time. Nidhal Bouaynaya (M.S. EE, CE '02) is trying to train artificial intelligence tools that are trustworthy enough to guide soldiers on the battlefield, and Nancy Paridy (LAW '83) is helping to lead what has been consistently ranked as the top rehabilitation hospital in the country.

We are extremely proud to highlight the continued accomplishments of our alumni community. Thank you for your continued support, and we look forward to hearing about your stories in the future.

Sincerely,
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Illinois Institute of Technology, also known as Illinois Tech, is
a private, technology-focused research university. Based in the
global metropolis of Chicago, Illinois Tech is the only university of
its kind in the city. It offers undergraduate and graduate degrees
in engineering, science, architecture, business, design, human
sciences, applied technology, and law.

One of 22 institutions that comprise the Association of Independent
Technological Universities (AITU), Illinois Tech provides an
exceptional education centered on active learning, and its graduates
lead the state and much of the nation in economic prosperity. At
Illinois Tech students are empowered to discover, create, and solve,
and thus uniquely prepared to succeed in professions that require
technological sophistication, an innovative mindset, and an
entrepreneurial spirit.

Mission Statement

To provide distinctive and relevant education in an environment
of scientific, technological, and professional knowledge creation
and innovation

Armour College of Engineering
Chicago-Kent College of Law
College of Architecture
College of Computing
Institute of Design
Lewis College of Science and Letters
Stuart School of Business

ADA Statement

Illinois Institute of Technology provides qualified individuals with
disabilities reasonable accommodations to participate in university
activities, programs, and services. Such individuals with disabilities
requiring an accommodation should call the activity, program,
or service director. For further information about Illinois Tech's
resources, contact the Illinois Tech Center for Disability Resources
at disabilities@iit.edu.



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Read *Illinois Tech Magazine*
online at magazine.iit.edu



Letter to the Editor



"Many of your articles in the fall issue were biographic. Some articles covered the fact that various people, such as Mike Graff and Sydney Hardwick, grew up on Chicago's South Side—like me. I wait, with much anticipation, to read Class Notes in each magazine.

I would think the media, in today's world, would pay more attention to Mohammad Asadi making propane from carbon dioxide! Wow—[the *Wall Street Journal*] says Illinois Tech is the Best College in Illinois."

—Ronald A. Dickman (BE '67)

ILLINOIS TECH MAGAZINE



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Correction:

A graphic on page three of some versions of the fall 2023 issue of *Illinois Tech Magazine* incorrectly attributed the source of recent college ranking statistics. The *Wall Street Journal*/College Pulse 2024 survey ranked Illinois Tech as the #1 Best College in Illinois, #23 Best College in the United States, and #16 for salary impact. *U.S. News & World Report*'s 2024 rankings placed Illinois Tech at #12 in earnings for graduates, #29 for best value, and #98 for Best Overall University.



AN INVESTMENT IN CHICAGO

200+

Current Chicago Difference Scholars

100+

Chicago Difference
Scholars Added Each Year

\$30 M

Institutional Funds Invested
Per Year to Support Scholars

\$150 M

Total Institutional Funds
Invested Over the
Next Five Years

92%

Retention Rate for Fall 2023
Chicago Difference Scholars



COMMUNITY

Chicago Pipeline

The Chicago Difference program offers focused financial and academic support for incoming students who are graduates of Chicago high schools—particularly those from underrepresented backgrounds. In addition to financial assistance with tuition and room and board, depending upon need, the initiative also offers wraparound support services such as academic and career mentorship, as well as health and wellness services.

Illinois Institute of Technology is now redoubling our efforts to serve as an engine of opportunity for students from Chicago with a renewed investment of institutional funds in The Chicago Difference. —*Tad Vezner*

Fraternal First



Illinois Tech's chapter of Alpha Psi Lambda

When Illinois Institute of Technology student Laila Mendez (ME, M.A.S. EM 4th Year) explored how to found a

chapter of a national Latino-interest fraternity at the university, she was told to hope for five initial members.

"The [fraternity officials] said, 'You're very lucky if you get over five,'" Mendez says. "That's the minimum you need."

Instead, 30 Illinois Tech students expressed interest in joining the newest Chicago-based chapter of Alpha Psi Lambda, the first and largest co-ed Latino fraternity in the United States.

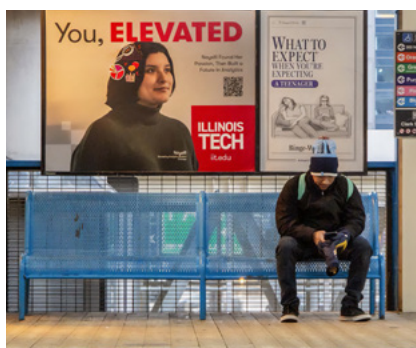
The fraternity—which accepts associate members (pledges) of all genders and nationalities—is the first Latino-interest Greek organization on campus. The 30 people who expressed

interest were narrowed down to a "founding line" of 14 members who appeared most willing to commit time and effort to the fraternity. Mendez was elected as the chapter's first president a few weeks after the chapter's founding in November 2023.

"My hope is to inspire more multicultural—Latin, Asian—Greek organizations to come to campus," she says. "Just because it wasn't there before, doesn't mean people aren't willing to look for it."

Mendez says the initial focus of the fraternity will be to plan Latino-interest events and activities on campus.

—*Tad Vezner*



UNIVERSITY AWARENESS

Elevating the Experience

There are many reasons why Illinois Tech is a special place to so many people, but the most important is the alumni, students, faculty, and staff who comprise and elevate the Illinois Tech community. For that reason, when the university set out to develop a local awareness campaign to support student recruitment efforts, it was essential to highlight the people who make up the Illinois Tech community through the campaign.

Students have utilized their Illinois Tech education to elevate their futures—be it in their careers, in their education, or through other incredible feats—so this campaign is focused on highlighting their Illinois Tech experience.

The *You, Elevated* campaign launched in February throughout the city of Chicago with advertisements on Chicago Transit Authority buses and at CTA train and bus stops; not long after, two digital billboards along major highways in the city went live as well.

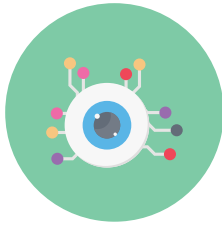
But the goal of the campaign is to tell a much fuller story about how individuals throughout the Illinois Tech community are finding success and impacting the world.

We're asking you to share your #YouElevated story with us.

To learn more about the *You, Elevated* campaign and to share your #YouElevated story, please visit youelevated.iit.edu. —*Andrew Wyder*

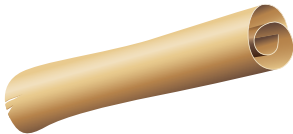


“Headliners



“WE’RE TRYING TO MAKE AN ARTIFICIAL INTERFACE, A CYBERNETIC INTERFACE TO THE BRAIN, AND NOBODY REALLY KNOWS THE LANGUAGE TO TALK TO THE BRAIN.”

—Robert A. Pritzker Endowed Chair in Engineering Philip R. Troyk on WGN discussing his research on an implantable device to help restore vision



“There is nothing in our traditions or the Constitution that prevents someone who is indicted or convicted or, in fact, serving in jail, from also serving as the president. Does it make any sense?

No. But there is no constitutional disablement from that happening.”

—Professor of Law Harold Krent, on Raw Story, discussing how former President Donald Trump could again serve in office while in prison



“I think it is possible to get zero organic waste into landfills. But it means that we need an infrastructure [and] we need incentives both for households, as well as for commercial institutions.”

—Professor of Environmental Management and Sustainability Weslynn Ashton, in the Associated Press, discussing how to cut food waste following two U.S. EPA reports revealing the scale of waste in the country



Chicago Public Schools student Armando Rodriguez speaks at the Runway 606 press event at Illinois Tech.

CHICAGO

Shortening the Runway

A new initiative created through a collaboration between Illinois Institute of Technology and two other major Chicago educational institutions will create specific pathways into tech fields while providing supportive mentorship and cutting the time it can take a student to earn a master’s degree by as much as two years.

Runway 606—a joint collaboration between Illinois Tech, City Colleges of Chicago, and Chicago Public Schools—allows students who earn their associates degree in high school to then apply those credits toward specific STEM master’s degree programs at Illinois Tech.

The first-of-its-kind program is aimed at providing CPS students with an accelerated pathway to high-demand, well-paying tech careers while growing the local tech talent pool.

“We have always prided ourselves on being an opportunity engine,” Illinois Tech President Raj Echambadi said at the kickoff event in March, adding that the Runway 606 program was “a seamless pathway in terms of moving students and learners into high-demand, high-wage, high-need jobs for the country so that the city of Chicago can prosper, the state of Illinois can prosper.”

After a successful pilot program launched in fall 2023 with 85 students attending CPS Early College STE(A)M schools, the partner institutions signed a landmark collaboration agreement in December to launch Runway 606 citywide.

The first Runway 606 pathway builds on the pilot program, focusing on those wishing to pursue careers in cybersecurity. Illinois Tech aims to quickly expand the program beyond cybersecurity to encompass other in-demand tech fields such as computer science, business analytics, and other STEM career paths within a few years.

“This program is not just about creating pathways to success; it’s about building a stronger, more resilient Chicago,” Chicago Mayor Brandon Johnson said in a written statement. —*Tad Vezner*



ATHLETICS

Record Breaker and Leader, In and Out of the Pool

Student-athletes in STEM fields, Anna Slominski (CE, M.S. TE '23) believes, can have a harder time coming out as queer. Slominski, who uses the pronouns they/them, has served as both an academic leader and prolific record-breaker on the university's swimming and diving team.

And this year, the National Collegiate Athletic Association recognized Slominski's achievements by naming them the 2023 Division III LGBTQ Student-Athlete of the Year.

Slominski, who is also the president of Illinois Tech's Environmental Engineering Club, held numerous Illinois Tech school records at the start of the 2023–24 season, including the 50-yard freestyle (23.67 seconds), the 200-yard freestyle (1 minute 54.13 seconds), the 100-yard breaststroke (1:03.81), the 200-yard breaststroke (2:19.33), and the 200-yard individual medley (2:06.87).

At the 2023 Liberal Arts Conference Championships, Slominski became the conference record holder for the 50-yard freestyle, the 100-yard breaststroke, and the 200-yard breaststroke.

They also made history by becoming the first person from Illinois Tech to qualify for a NCAA D-III championship meet. Although that meet was canceled due to the COVID-19 pandemic, they competed in the 2023 NCAA championship, while also being named Illinois Tech's Women's Athlete of the Year.

In explaining its decision, the NCAA noted that Slominski "organized a panel discussion of queer engineers with a goal of connecting current LGBTQ students with STEM professionals with queer identities. Additionally, Slominski presented on queer issues and identities during a summer internship during Pride Month last June."

In a YouTube video responding to the honor, Slominski said, "Being queer is such a personal part of one's life, especially in academics and athletics; it can be hard to integrate yourself into more nonqueer communities....To be a voice for people in STEM, as well as an athlete on campus, I just want to make an impact in that way."

In an interview with *Illinois Tech Magazine*, Slominski—who came out

as bisexual when they were 11, and nonbinary in their second year of college—adds, "I have always been a really authentically out person. I've had really supportive parents and a supportive partner. The meaning of the award didn't hit me until I was in front of 200 people giving a speech. It was an incredible experience. There were plenty of people at the award ceremony that came up and said thanks."

That supportive atmosphere continued at Illinois Tech, Slominski notes.

"Sometimes it's not about large initiatives, but more so about the day-to-day way the athletic department interacts with student-athletes. And I feel Illinois Tech's athletic department is very inclusive with its athletes," Slominski says.

"It was truly a pleasure being able to witness Anna receive [the NCAA award]. It couldn't have been given to a more deserving person. We are extremely proud of them," says Illinois Tech Athletics Director Usha Gilmore.
—Tad Vezner



Weslynn Ashton

SUSTAINABILITY

Creating an Equitable Food System

A research project led by Illinois Institute of Technology Professor of Environmental Management and Sustainability Weslynn Ashton has received a \$1 million grant from the United States Department of Agriculture to investigate how to harness the power of food procurement by large, public institutions in order to shift food production and distribution systems toward greater racial equity, sustainability, and resilience.

The year-long pilot project, called Community Food Mobilization in Chicago (CF-MOB), “is focused on how institutional supply chains can integrate locally produced food,” says Ashton, who also is a faculty member in the Institute of Design.

The award is part of the National Science Foundation’s Civic Innovation Challenge (CIVIC) program, which supports pilot projects that apply emerging technologies and concepts to address community-identified challenges.

Ashton is joined in the project by co-principal investigators M. Zia Hassan Endowed Professor Elizabeth J. Durango-Cohen from Stuart School of Business and Associate Professor of Civic and Community Design Maura Shea at ID, as well as several Illinois Tech students who will serve as research assistants. Ashton and Shea co-direct ID’s Food Systems Action Lab.

Ashton says most of the food served in schools, hospitals, and other public institutions is procured through large food-service management companies, who in turn source from very large suppliers, but this supply chain does not adequately account for the human and planetary health impacts that it creates and often excludes small growers and food producers, particularly those who identify as Black, Indigenous, or people of color (BIPOC).

The CF-MOB research will center on an approach that could integrate local food suppliers, especially those that are BIPOC, into institutional procurement processes.

—Scott Lewis

INNOVATION

Diversifying Chicago’s Tech Sectors

Illinois Institute of Technology has received a \$6 million grant from the United States National Science Foundation to translate research at the university into practical, societal solutions.

The initiative, part of NSF’s Accelerating Research Translation initiative, incorporates industry professionals and faculty in Chicago’s tech ecosystem. It aims to specifically engage underrepresented populations, including first-generation college students and other learners from diverse backgrounds in the Chicago area, in practical commercialization experiences within high-growth technology sectors.

“At Illinois Tech, we believe that the richness of ideas comes from a diverse mix of minds. It’s this diversity that will drive the next wave of technological breakthroughs and societal advancements,” says Illinois Tech Provost Kenneth T. Christensen.

The low representation of Black and Latino tech founders in Chicago, currently at only 6 percent, underscores a crucial gap. Illinois Tech, situated in the predominantly Black neighborhood of Bronzeville, is uniquely positioned to directly address this disparity.

The objective is to transform at least 40 percent of seed translational research projects into commercial opportunities, as evidenced by negotiated licenses within two years of project acceleration. Illinois Tech, under this initiative, is set to fund two transformative research projects each year for four years.

By the end of the initiative, it also aims to provide commercialization training to at least 150 degree-seeking students and 100 underrepresented non-degree seeking learners. —*Tad Vezner*





The Hard Pivot

By Tad Vezner

PHOTOS BY BONNIE ROBINSON

A few months after working on the floor of Guero Pallets, learning how to operate every machine and forklift, Martha Razo (AMAT, M.S. '17) was handed a shoebox full of receipts. It was her father's "filing system."

It was rare to have a woman in the industry, much less working the floor. Her fellow employees at the pallet plant on Chicago's West Side had answered her countless questions as she learned the ropes. But her father, Agustin Razo, who owns and founded Geuro Pallets, had found a harder job for her.

The shoebox wasn't that difficult to organize. But the more she organized, the more her trepidation grew.

"It didn't really trigger until my father let me have access to the [company] bank account," Razo says. "We were \$3,000 in the red [in debt]."

She immediately confronted Agustin and implored to him, "Stop writing checks!"

"That's why I have *you* here, so figure it out," she remembers her father saying. He had rarely spared words on her after she'd left home at the age of 18. He still hadn't forgiven her, she thought, wondering if it was a test she was meant to fail.

Within six months, Razo had the business back in black. Her father made her CEO of the company, which thrived where competitors failed during the COVID-19 pandemic. Since then, Razo has led a book project with 20 other female entrepreneurs and launched the Xcelerator Business Summit, a Chicago-area business conference.

"For Martha to do what she's done is a huge accomplishment. She's had to overcome many obstacles. Her business is mostly male-dominated," says Ron Hernandez, a business colleague who attended the conference as co-founder of Chatavise, a web-based business texting platform. "To know that was the first event she ever put on was kind of crazy. It had 35 speakers and hundreds of attendees."

Says Razo, "If somebody humiliates me because I'm a woman and I'm so young, I work harder. I always tell myself, 'You want to be the dolphin in the ocean, not the droplet in the ocean.'"

AGAINST TRADITION

Growing up in a traditional family, Razo was told she could start dating when she turned 18. Then, when she turned 18, her father told her, "wait until you're 25."

She moved out that same year, after graduating from Chicago's Curie Metropolitan High School.

"My father gave me the silent treatment," she said, adding, "He encouraged [her brothers] to work. He always pushed them; he never pushed me. But kids are stubborn, they want to do the opposite. I was used to the hustle of doing more than I was expected to."

When she was 14, Razo created a nonprofit called Students for Students, which offered college scholarships for undocumented students. She knocked on

"I still look like I'm 15. This is a male-dominated industry, and a lot of men wouldn't take me seriously. It was tough in the beginning."—Martha Razo

PHOTO: BONNIE ROBINSON

doors on Chicago's West Side and raised \$8,000.

Razo got into Illinois Tech with a hefty aid package, but she still needed to support herself. She got a job at Chipotle, "and I was just terrible," she laughs. "But I was so nice and optimistic that they kept me."

She winded up cleaning bathrooms. After less than a year of that, she returned to her father and said simply, "I need a job."

"I knew work was sacred to him. He wasn't going to say no to that," Razo says.

But Razo notes that she was literally a "little lady," petite and easy to dismiss.

"I still look like I'm 15. This is a male-dominated industry, and a lot of men wouldn't take me seriously. It was tough in the beginning," Razo says.

After inheriting the shoebox of receipts, Razo embarked on a three-month crash course in QuickBooks, pricing, and getting to know every vendor and client. Within six months, she had the business out of arrears; she graduated the following year, and her father immediately made her CEO.



ALWAYS BE PIVOTING

When the COVID-19 pandemic arrived, Razo was accustomed to pivoting—and fast. She quickly increased her pricing in reaction to supply chain shortages, and rather than cold-call nearby warehouses for new clients, she'd visit them onsite.

"I'd just go into shipping and receiving, and say, 'We sell pallets.' Nobody ever really goes out and cold-calls into somebody's warehouse. They said, 'Oh, this is an interesting human,'" Razo laughs.

John St. Anthony, director of warehousing for Grane Transportation, a Chicago-based multimodal transportation and distribution company that is a Guero client, says, "I liked her style. She was bold enough to come in, and she sold her company pretty convincingly. She's very impressive; she's got no fear."

Razo says it comes down to an essential rule of sales: "People do business with people. People like people. At the end of the day, it doesn't even matter about price."

Guero's revenue went from \$5 million to \$14 million

during the pandemic. Razo's success made her want to help others in the business community. In December 2022 she published a book called *Business Diva*, with contributions from 21 other female business owners who offered their insights about what they'd learned as entrepreneurs.

After the book launch, she thought, "Why not a bigger event?" She put down a deposit at the Tinley Park, Illinois, Convention Center for a business summit with her own money. All her time networking at countless chamber of commerce meetings and business groups would be put to the test.

In the end, she recruited 35 speakers (her goal was 18) and filled 82 booths. Roughly 300 people attended the 2023 Xcelerator Business Summit. This year, she wants to triple that for the October 3–4, 2024, event.

"A lot of times business owners, they're in their business instead of working on their business," Razo says. "Like I said, people like people. That's what it's about." ●

Light(ing) a New Path

By Tad Vezner

PHOTOS COURTESY OF KAIWAI TENG



Kaiwei Tang (M.B.A. '06, M.DES. '14) was sitting in a New York subway station, shortly after leaving his job working for a major phone manufacturer. He swore he'd never build another phone in his life.

Looking up, he saw "nine out of 10 people, just swiping." Tang remembers seeing a woman standing next to her stroller. The baby inside was crying, while the woman blithely swiped away.

"Is this what humanity should be?" he asked himself.

He left the subway and reported to the Google incubator that served as his workspace. Most of the other people working there were entrepreneurs and investors, developing new consumer apps. They were all talking about garnering user attention with their startup ideas, gushing excitedly about how much time they could capture, how much data they could collect.

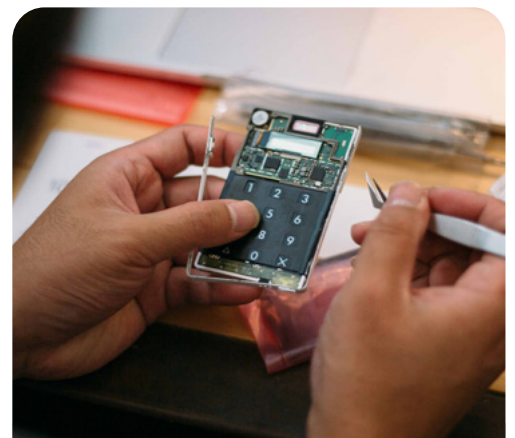
"That's how all social media makes money—engagement," says Tang, CEO and co-founder of Light Phone, Inc. "And if you follow that, no wonder this is how we are."

But one person at the incubator shared his discomfort with the way things seemed to be going: an artist and designer named Joseph Hollier. Together, the two of them started a test group.

They gave a stripped-down version of a smartphone—literally just a phone with no apps, camera, or any attachments whatsoever—to a bunch of busy New Yorkers and witnessed something surprising.

"Just tell me, when was the last time anyone in your life said, 'I just spent six hours on Facebook, and I loved it!'"

—Kaiwei Tang



The interior circuitry of a stripped-down Light Phone

First came the anxiety, of course—all those missed emails, no quick streaming fix from apps engineered to ensnare attention and emotions.

But then, after a couple hours, a new emotion took over: relief.

“We interviewed everyone, and they said this was the best day of their week. They didn’t have to always think about tweeting or emailing,” Tang says, before laughing and adding, “Just tell me, when was the last time anyone in your life said, ‘I just spent six hours on Facebook, and I loved it!’”

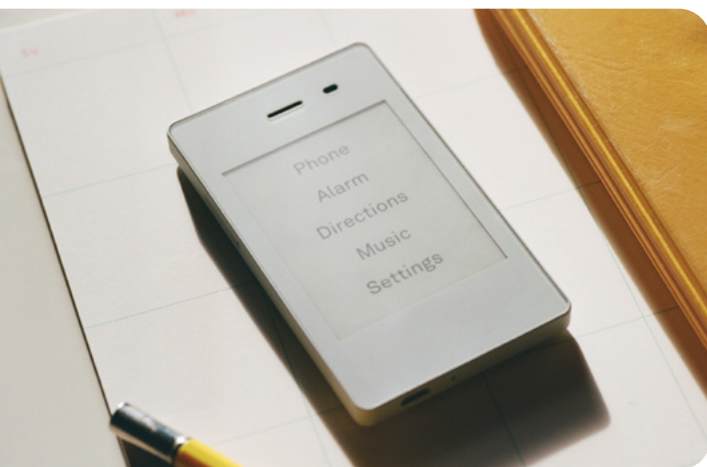
Born and raised in Taiwan as the son of a school teacher and a military general, Tang got his first job after graduating from Illinois Institute of Technology as a product design and engineering lead for Motorola. He learned about everything from communications satellite technology to mass phone production.

But he found his motivation flagging.

“I quit because I had the feeling that this is the golden age of smartphones, and I thought, ‘No one needs a new smartphone every three months. Why are we creating this thing?’ I also had the nagging feeling that my smartphone was taking over my life,” Tang says.

“If you take a vacation, sit on a beach, try to relax, try to watch the waves, the sun, the clouds...and then something pops up from work, you can’t stop thinking about it, and it kind of ruins your whole day.”

But after witnessing the relief of New Yorkers freed from their need to swipe, Tang saw the root of the problem. Not the phone itself, but its tether to the “attention economy.”



The Light Phone II

The next year, in 2015, Light Phone Inc., was born, both as a manufacturer and service provider. Since then, it has grown to nearly 100,000 subscribers—and has even been integrated in some schools.

The Buxton School, a boarding school in Massachusetts, banned smartphones for students and offered

Light Phones instead. In a video featuring school staff, one faculty member yearned for the “productivity of boredom.” Another noted that students “can’t imagine life without [their smartphones]” and spoke about their phones using “the language of addiction.”

But student after student featured in the video then talked about how not having a smartphone forced them to develop, gain confidence, and talk to people more.

Tang says he’s in discussion with approximately 20 more schools to do the same thing.

Some big names in the tech industry have since invested—including those who helped create the social media landscape and who now see some need for moderation. Biz Stone, who co-founded Twitter, invested in Light Phone, Inc. in 2022.

Tim Kendall, a former president of the social media app Pinterest, has become both an investor and board member for Light Phone. He points to recent studies revealing increased depression among teens.

“I think the phone thing is so similar to the food thing in what people battle,” Kendall says. “The only sustainable thing is to get the thing that you want to eat every night out of your house.”

Kendall remembers visiting Tang and Hollier in New York after researching their efforts.

“I knew within a few minutes that I wanted to support them, because they were so passionate about the problem,” Kendall says. “I support people who are zigging when you want to be zagging. You have to be contrarian, and you gotta be right. To be able to design and manufacture this thing with the limited amount of capital they’ve raised is extraordinary.”

When it comes to Tang in particular, Kendall adds, “I think he’s an outlier among outliers. In some ways he’s selling virtue, and that’s hard. And he doesn’t waver on that.”

Still, some users have pushed back on the Light Phone’s bare-bones concept. In response, Tang says the new Light Phone II includes features such as the ability to text and find directions.

When asked whether this is a betrayal of the original concept, Tang stresses that he’s adhering to three core principles. No “infinite feeds,” i.e., no social media. No ads. And finally, a finite, limited number of quick-to-use, utilitarian tools—and nothing else.

“Users should ‘hammer their nail’ and put it away for the rest of the day. You don’t swipe your hammer for five hours so the hammer company can make money,” Tang says.

Asked about the future of phone technology, he says he’s hopeful.

“One thing I find most encouraging is that most of our users are Gen Z. I think young people are finally realizing the problem,” Tang says.

“Every year the conversation is getting bigger and more intense. The bigger the interconnectedness, the bigger the pushback. And that makes me feel good about our future.” ●

Good Medicine

By Kayla Molander



It's about solving problems," says Nancy Paridy (LAW '83).

Solving problems in the medical field—using the most modern, innovative models possible—is what Paridy has been advocating for decades. The effort has paid off: she now helps run the top-ranked rehabilitation hospital in the country.

Paridy is the president and chief administrative officer at Shirley Ryan AbilityLab, where she was hired to create the hospital's general counsel's office in 1995, back when it was known as the Rehabilitation Institute of Chicago.

"One-third of the people in the world will require some rehabilitation during their lifetime," says Paridy. "That is a huge, huge number. We've really got to be focusing on the future and how can we help mold that future."

In her more than 25 years at the institution, Paridy has taken on an increasing number of roles. Foremost among them, she was instrumental in the creation of the Shirley Ryan AbilityLab, the first translational research hospital where researchers partner with clinicians in patient care.

"Nancy is one of the most compassionate, hardworking, smart, perceptive, and dedicated professionals I know. She motivates everyone around her to do their best work," says Laura Keidan Martin, partner at Katten, who has worked with and partnered with Paridy for years. "It constantly amazes me how many hats she wears and how well she wears them. In most organizations, it would take at least three people to fill her shoes."

The model Paridy and her colleagues have built at Shirley Ryan AbilityLab remains well-received: *U.S. News & World Report* has ranked it as the #1 hospital in the country for rehabilitation for the last 33 years.

"In addition to caring for people with traumatic brain and spinal cord injuries, stroke, and amputation, one of the many things we do really well is help condition patients before, during, and after cancer treatment," Paridy says. "Because we have found that if we partner with their acute care physicians in regard to rehabilitation, patients actually have better outcomes."

Dr. Richard Lieber, chief scientific officer at Shirley Ryan AbilityLab, says Paridy brings a wealth of legal knowledge and expertise to the position, and is fueled by deep-seated empathy for everyone around her.

"Her passion is authentic and her energy—she outworks us all," says Lieber, who is also a senior research career scientist at the Edward Hines Jr. VA Hospital and a professor at Northwestern University. "She is definitely one of the most considerate and compassionate humans I have ever known."

Paridy says that her concern for people, especially patients with disabilities, is a major part of why she originally took the position—and why she continues to stay dedicated.

"My mother had a stroke when I was in high school," she says. "So I particularly connected with people who had disabilities. Everybody puts their pants on one leg at a time, and it doesn't matter who you are or what you do. We need to celebrate our differences."

But the male-dominated legal world didn't always celebrate Paridy's differences. When she was starting out as an associate at her first firm, now known as Nixon Peabody LLP, her boss received a letter from opposing counsel that complained about having to argue against a woman.

She wrote the associate a letter back, stating, "Dear [X], I am in receipt of your letter. I am the attorney of record now. I think it's important for you to realize that 34 percent of last year's law school graduates were women. If you have problems litigating against women, you might want to consider consulting the following career counselors to find a new career for yourself."

Her next position was at the firm now known as Dykema Gossett PLLC, where she litigated many medical cases, often representing doctors and hospitals. She became one of the firm's first female partners.

At the time, Paridy didn't have many professional female mentors. They simply didn't exist. Now she tries to fill that role for others.

"I'm committed to helping women stay in the legal field. I don't like the term work-life balance because that pits the profession I chose against my life," she says. "I like to talk about work-life harmony."

Throughout her career, Paridy has advocated for innovation in patient care on a national level.

Since Shirley Ryan AbilityLab opened in 2017, Paridy has tried to advance its "wraparound" model—combining experts in various fields in one concurrent workspace—in other institutions across the country.

"We want to treat the most catastrophic cases, because we wrap research and clinical care around our patients," she says. "But we also need to get out into the world and into the community and help other organizations provide the best practices and best care."

For almost a decade, Paridy voiced those concerns on Capitol Hill. She tried to convince lawmakers of the need for a special designation for hospitals that perform research into traumatic brain and spinal cord injuries.

In December 2022 the United States Congress passed the Dr. Joanne Smith Memorial Rehabilitation Innovation Centers Act, which creates just such a designation. The law, named for Shirley Ryan AbilityLab's former CEO, provides a mechanism to extend best practices to rehabilitation facilities throughout the country.

"We need to get best practices out to the rest of the country, so all patients can benefit from it," Paridy says. ●



PHOTO BY BONNIE ROBINSON



Building a Battlef

By Tad Vezner

Nidhal Bouaynaya (M.S. EE, CE '02) had reservations about artificial intelligence. It went against everything she was comfortable with as an engineer who preferred things that were clear and predictable.

“Coming from a background where the clarity and predictability of mathematical models were key, I found AI to be somewhat unsettling,” Bouaynaya explains. “In engineering and mathematics, the reasons for a system’s failure are usually identifiable and logical. AI is a different story; it operates on principles that can sometimes lead to unpredictable outcomes without clear explanations.”

Despite these initial reservations, Bouaynaya couldn’t ignore the undeniable success of AI.

“I witnessed AI’s performance surpassing that of state-of-the-art models,” she notes.

And so Bouaynaya started to make strides in AI research, trying to fix what she thought was broken. She wanted a way to peek under the hood of those algorithms, or at least get some idea of how certain AIs were in their answers.

Her research efforts in trustworthy AI were initially funded by the National Science Foundation, and

subsequently attracted significant military funding, enabling her to develop reliable AI applications for the Army.

The project, for which she has just been awarded \$8.5 million in total funding, involves speeding the development of a combat simulation system in an immersive virtual reality environment, which uses AI to sense the environment and recommend responses to its users.

In her words, she is in the process of creating “secure, immersive, and dynamic mixed-reality environments, with futuristic threats and engagement scenarios, aimed at enhancing the operational assessment of forthcoming gunner turret systems, thereby expediting their advancement.

“And picture this,” Bouaynaya elaborates, imagining a soldier nestled within a vehicle’s gunner turret. “They’re faced with a crucial decision: What’s the significance of this [AI] output? Or should they trust their instincts instead?”

It all comes down to trust in AI.

And trust in AI—as well as an AI’s measurable trust in itself—was exactly what Bouaynaya has been trying to pin down for years.

Born and raised in Tunisia, Bouaynaya spent a lifetime traveling. First she received her undergraduate degree in



“Once [AIs] were trained, they became what I call ‘self aware.’ They truly comprehend the data. As the attack intensity escalates, so does their uncertainty. That confidence [or lack thereof] is learned during training.”

—Nidhal Bouaynaya

Paris from Lycee Louis-Le-Grand, followed by an engineering diploma from École Nationale Supérieure de l'Électronique (ENSEA)—earned concurrently with her electrical and computer engineering degrees from Illinois Institute of Technology through an exchange program. She then achieved her doctorate in engineering from the University of Illinois Chicago.

After a six-year stint as a professor at the University of Arkansas, she accepted a faculty position at Rowan University's Henry M. Rowan College of Engineering in 2013. She's now both the college's associate dean for research and graduate studies and a professor of electrical and computer engineering.

“Because of her background in mathematics as well as engineering, she has this unique ability to take theoretical, complex mathematical ideas and then use them in solving practical problems,” says Robi Polikar, head of Rowan's electrical and computer engineering department.

Despite Bouaynaya's background in math, she gravitated toward AI, first focusing on resolving an internal turmoil.

“How can I trust an AI when I cannot understand its failure mode or quantify its responses?” she asks.

“I cannot accept a system that simply states, ‘It's going to snow tomorrow.’ It doesn't mean anything without a certain level of confidence,” Bouaynaya adds. “It's an algorithm; even if it's 99 percent accurate, it's bound to error eventually. The problem is we don't know when it's going to make a mistake. And we cannot do any of that analysis, because it's a black box.”

With funding from NSF, Bouaynaya started to study how “confident” AIs were in their answers. It appeared at first glance that the more wrong they were, the higher they set the probability that they were right. Kind of like humans in some regards.

“Imagine you have a really smart friend who learns a lot of things from a textbook,” Bouaynaya says. “Sometimes, they learn so much that they start to memorize every detail in the book, even things that are not very important. When you ask them a question about something they've never seen before, they might still act like they know the answer, just because they're so used to remembering everything from the book. This is similar to what happens with complex computer models.”

So she altered the training of AIs in such a way that the systems became aware of their “confidence” when faced with incorrect data, fostering the development of self-aware AI models. With alteration, they began to develop a lower certainty in wrong answers.

When data was maliciously altered to deceive the system—for instance, when a few pixels of a picture were changed to make it hard to identify—the AI started assigning a lower probability to answers that it thought were right. And Bouaynaya created a second measurable metric—called uncertainty, rather than converting raw scores into probabilities—that went through the roof in such instances.

Adding the additional metric allowed users to more accurately gauge how much trust they could put in the AI's answers.

“Once they were trained, they became what I call ‘self aware,’” Bouaynaya says. “They truly comprehend the data. As the attack intensity escalates, so does their uncertainty. That confidence [or lack thereof] is learned during training.”

In high-stakes scenarios where soldiers must make split-second, life-or-death decisions, the reliability of AI becomes paramount, Bouaynaya says.

“In such moments, having AI that not only provides answers, but also quantifies its certainty can be the difference between success and failure, between safety and peril,” she says. “Knowing the level of confidence in AI's responses empowers soldiers to make informed judgments, allowing them to trust the technology as a valuable ally in their mission-critical tasks.” ●

CONSTRUCTIVE CHANGE

BY TAD VEZNER



The first office Jimmy Akintonde (ARCH '95) used for his business was barely able to accommodate two desks. The two extra chairs that clients would hopefully sit in someday made it seem a bit crowded, but he had faith.

After seven years working for a major national general contractor, managing projects that cost tens of millions of dollars, Akintonde set out on his own. "I remember putting in a ridiculous amount of time," Akintonde says. "I just felt at the end of it I wanted to jump into something that felt a little more glorifying, more satisfying."

Ujamaa Construction was born. After a few months working out of his attic, he found a small business incubator at an old office building in the Auburn Park neighborhood on Chicago's South Side. The manager there was impressed with Akintonde, and agreed to give him a 10-foot by 15-foot, third-floor office rent free for three months.

"I remember thinking, I've got three months to make this work," Akintonde says. So he scrounged furniture from the "boneyard" of empty offices on the floor above him—the remnants of failed enterprises literally looming over his head—and found his first client: a South Side church wanted to renovate a small apartment building for low-income residents. The project went well, and he found a few others, small projects that built his business.

"When I finally hired my first employee in 2002, the joke was, one person would have to leave the office when the other person was there to make room," Akintonde says.

The business has since grown to more than 150 full-time employees, with regional offices in Illinois and Georgia, and moved its headquarters to a large building at 7744 South Stony Island Avenue in Chicago. They've partnered with other outfits to tackle major commercial projects such as the 40-acre Marshfield Plaza retail site in Chicago's Morgan Park neighborhood; the 50-acre Chatham Market—the site of Chicago's first Walmart—in the city's Chatham neighborhood; and a Whole Foods location in the city's Englewood neighborhood.

While it's a far cry from his humble beginnings, Akintonde says the biggest project is yet to come: helping to construct the Barack Obama Presidential Center in Chicago's Jackson Park neighborhood, where he's a key member of the team responsible for the build.

"It's been a successful journey, but it's not a success, because the story has yet to be written," Akintonde says of his career. "At the end of the story, if I inspire somebody else, I think I'll call that successful."

HUMBLE BEGINNINGS

Born and raised in Nigeria, Akintonde developed an interest in high-rise building design "because I didn't see a lot of it growing up." He'd break the toys his father bought him by "deconstructing" them to figure out how they worked and then putting them back together.

"Back then it was destructive, but it turned out to be constructive," Akintonde says.

He came to Illinois Institute of Technology to study architecture, but his path veered slightly. A professor told him that "to be a great architect, you should work for a contractor, to know what you're designing and how those pieces fit together."

After interning at architectural firms, he wasn't excited. But he worked one summer for a small contractor building townhomes in Forest Park, Illinois, and loved it.

His first job out of college was with Walsh Construction, which eventually tasked him with rehabbing public schools and police stations in Chicago. His final project before striking out on his own was a \$60 million renovation of Chicago Transit Authority train stops in the early 2000s.

Terry Frigo, a former Illinois Tech associate vice president for facilities construction and rental properties, gave Ujamaa its first commercial contract a couple of months after meeting Akintonde at a business outreach event. Akintonde's company went on to rehab numerous buildings on campus.

"He was dedicated and very serious about the construction industry, and his work was excellent and timely," Frigo says.

Akintonde now sits on the Illinois Tech Board of Trustees and is co-chair of The Chicago Difference program; his wife, Shanita Akintonde (M.B.A. '97), serves as chair of the Illinois Tech Alumni Association's International Committee.

A NEW CORNERSTONE

While he still fondly remembers those first projects, a new career cornerstone—the 20-acre Obama Center, which will serve as a museum, library, and community and conference center—looms on the near horizon.

Akintonde's enthusiasm for the project is rooted in how the development team was put together—the opposite of how it's usually done. Four medium-sized, minority contractors (Ujamaa being one) partnered to create an LLC called the Presidential Partners. They then retained a larger partner, Turner Construction, and the five created Lakeside Alliance LLC.

Instead of the large, majority contractor taking the lead, it is the minority partners who are leading the project.

"This is the first time in my experience, and everyone else's, that the minority partners held a majority interest," Akintonde says. "It's truly transformational."

Akintonde adds that the team is taking pains to walk the walk when it comes to social responsibility on the South Side, such as making sure that all minority contractors get good experience and that the group hires from the community where the project is located.

"We want to make sure it has a lasting effect on the people in the community beyond its construction," Akintonde says, "believing in diversity by living it, by walking it, and by supporting it."

Lori Healy, who manages the Obama Center's construction and operations as a senior vice president for the Obama Foundation, which will also be housed at the center, has nothing but praise for Akintonde and his company.

"Jimmy is incredibly well-respected and thoughtful. There's so many people who are really competent but are not great to work with. He is. The ethics of his company are unparalleled," Healy says.

Healy, who formerly served as the chief executive officer for Chicago's Metropolitan Pier and Exposition Authority, added that Akintonde's reputation has made him, "a person and a company people seek out to be part of their teams."

"The way he does things, he's truly transformative." ●

Class Notes

1960s

WILLIAM "BILL" BAHNMAIER (ME '60), Fort Belvoir, Va., a former instructor emeritus at the Defense Acquisition University, recently qualified as a volunteer docent at the National Museum of the United States Army in Fort Belvoir, Virginia.

HANS H. NOE (ARCH '60), New York, was featured in the *New York Times* for his wooden sculptures on October 4, 2023.

NORBERT "PETE" POINTNER (ARCH '61, M.S. CRP '62), Wheaton, Ill., offers a free e-book, *Readings in Urban Planning and Design*, at petepointner.com.

HILTON KAUFMAN (PS '62), Chicago, retired from the Illinois Department of Employment Security.

ROGER M. COOPER (M.S. MATH '63, Ph.D. '69), Menlo Park, Calif., discovered a revolutionary new methodology using spontaneous eye-movement responses to spoken language as a new way to communicate.

DONALD G. HERVEY (ME '63), Centerville, Texas, published a paperback book on Amazon titled *Calypso First Encounter*. The book is about a spaceship with thousands aboard that tangles with a fleet of more advanced alien artificial intelligence spaceships.

WILLIAM MCCONOCHIE (M.S. PSYC '68, Ph.D. '70), Eugene, Ore., had his first granddaughter born in February 2024.

BRUNO J. TASSONE (LAW '69), Indian Head Park, Ill., received the 2023 Justinian Award of Excellence at the Justinian Society of Lawyers' Annual Installation and Awards Dinner on September 21, 2023.

1970s

RICK CARLSON (MATH '70), Glenwood Springs, Colo., joined the Ed Kaplan Family Institute for Innovation and Tech Entrepreneurship Board of Advisors, the College of Computing Board of Advisors,

and the Electrical Engineering and Civil Engineering advisory boards at Illinois Tech in 2023.

JUDGE ALFRED PAUL (LAW '71), Park Ridge, Ill., recently retired after many years of devoted service in the Circuit Court of Cook County. Paul reports that he and fellow retired judge **JAMES L. KAPLAN** (LAW '71) are now on a quest to fulfill their lifelong dreams of becoming stand-up comedians on the Las Vegas strip.

PETER P. HANIK (CHE '72), Houston, has written a book titled *Type 3 Solutions: Problem Solving for Competitive Advantage* (available on Amazon) that documents his more than 50 years of experience with innovation in management, technology, engineering, and manufacturing.

RICHARD MATECKI (PHYS '72), Crestwood, Ill., celebrated the 35th anniversary of his life-saving kidney and pancreas transplant in July 2023.

STEPHEN KLUMPP (ARCH '75), Wheeling, Ill., is now semi-retired, while still being the president and owner of AR-K-TEKS.

RONALD FRIEDMAN (BIOL '76), Des Plaines, Ill., has been appointed to the advisory Board of Directors of the nonprofit Devices 4 The Disabled (d4d.org).

MARTIN J. FENELON III (PS '77), Niantic, Conn., has written and published a book titled *There's a New Sheriff in Town: The Project Manager's Proven Guide to Successfully Taking Over Ongoing Projects and Getting the Work Done*, which fills a noticeable gap in project management literature. He followed that up with a fictional history mystery/thriller series set in 1930s Chicago. The first three books in the *Barnstorming Detective Series*, under the pen name M. J. Finn, are being released on Amazon in the first quarter of 2024. The hero of the story is pursuing an engineering degree at Armour Institute of Technology.

SANFORD KADISH (M.A.S. BA '77), Israel, is retired and volunteering full-time as an English teacher to high school students at United States Army bases.

NICK CRAY (ME '80, M.A.S. '88), Mequon, Wis., retired in December 2023.

1980s

DAVID ERHART (CHE '80), Kaysville, Utah, closed out his professional career at Zoox.

SUSAN M. SCHNEIDER (ENVE '80), Kalamazoo, Mich., recently celebrated the appearance of a Spanish translation of her award-winning trade book on learning principles titled *The Science of Consequences: How They Affect Genes, Change the Brain, and Impact Our World* (Rowman & Littlefield). She currently focuses on climate change.

JAMES MCMAHON (MET '81), Winchester, Calif., created and edits the math blog, Math Vacation (jamesmacmath.blogspot.com).

MARK ZERWIC (M.S. PSYC '81, Ph.D. '84), Iowa City, Iowa, retired after 33 years with the Department of Veterans Affairs. He was chief of psychology at the Chicago veterans affairs health center and later chief of psychology at the Iowa City veterans affairs health care system.

GEORGE R. CROUSE (MGT '82), Chicago, has been awarded the State Director of the Year Award by the Independent Accountants Association of Illinois.

HERB VELAZQUEZ (M.S. DSGN '83), Alpharetta, Ga., published a book titled *Design Thinking Toolbox: Design Student's Innovation Handbook* on January 6, 2024.



Susan Schneider (ENVE '80) with the Spanish translated version of her book, which is titled *The Science of Consequences: How They Affect Genes, Change the Brain, and Impact Our World*.

'Outdoors Is for Everybody'

TO DEVELOP A “HARD” MATERIAL product good enough to stand out amongst an army of software apps at the prestigious TechRise Chicago pitch competition, longtime friends Qudsia Khan (ARCE '09, M.A.S. STE '11) and Sana Jafri had to come up with an idea that wasn't just promising, but timely.

They found one in the great outdoors that stood out among their peers to win the top prize of \$100,000 in the TechRise competition.

Whether it was enjoying long hikes or spending time at the local park with their kids, Khan (chief operating officer) and Jafri (CEO), co-founders of Babygami, discovered that the availability of easily packable, collapsible, and accessible containers and cups for their young children was slim to none.

Tired of buying and bringing along several different products on her outings, Jafri approached Khan with an idea for a collapsible, silicone baby bottle, and together they brainstormed and collaborated on its multipurpose functionality and sustainability.

But that wasn't the duo's only inspiration for wanting to break into the outdoor industry.

"The outdoor industry has only 1 percent founders of color," says Khan. "We also found that a lot of people of color just have a barrier to the outside in general. They feel like they don't fit the persona of what it means to be an outdoorsy person. So we want to show that the outdoors is for everybody, outside is for anybody."

They had the vision, they just needed the resources and business acumen to get Babygami off the ground. In 2021 Khan and Jafri joined REI Co-Op and Founded Outdoors' Embark program, a virtual, three-month program designed to support minority entrepreneurs in the early stages of their business ventures.



Qudsia Khan (ARCE '09, M.A.S. STE '11)

Having primarily an engineering background, Khan found the program to be integral to understanding the business side of a startup, including the importance of establishing a mission and a brand. Community and the idea that "outside is for everybody" became the central theme of Babygami, in addition to sustainability.

Khan and Jafri even started monthly outings for families in the Chicago area, where everyone could enjoy the great outdoors together and where parents could see the ease of Babygami in action.

With the business knowledge and solid customer base acquired through the Embark program, Khan and Jafri took on TechRise Chicago's pitch competition, which included the \$100,000 top prize.

After several rounds of pitching, Babygami found itself up against five software application companies in the final round of the TechRise competition.

"We were the only ones with a hard good," says Khan. "When I came up on stage, I handed each of the judges a bottle, and being able to have it in their hands and see how it works...that was a moment that really sealed the deal for us."

Khan's feelings of hope were assured as she and Jafri placed first, securing the capital that they needed to start mass-producing their product.

"It came at such a pivotal moment for us," Khan says. "We really were at a turning point, and it meant so much."

—Casey Halas

Stellar Career

SOME PEOPLE ASPIRE TO MOVE

mountains. But Daniel Eckhardt (EE, AMAT '12) aspires even higher: he wants to move spacecraft into the stars.

And he's well on his way.

When it comes to the technology powering the spacecraft of the United States Air Force and Space Force, as well as numerous other governmental, academic, and industry partners, Eckhardt is at the apex of his field. He has gone from leading a team, to being a Pentagon adviser, to ascending to his current role as principal expert for in-space propulsion at the Air Force Research Laboratory.

Eckhardt is the U.S. military's go-to math whiz when it comes to pushing metal through space. Whether it be augmenting the Space Force's own orbital assets, helping with NASA's ongoing Artemis program to put more people on the moon, or advising allied countries, Eckhardt may not have a career that is quite as vast as space itself, but it's as broad as any career can be.

"It's serving a customer with vast interests. Any technology you can think of, we have someone thinking about it," Eckhardt says about his work at the research laboratory, which has a workforce of 12,500 people across nine locations. "Our work does matter, because you do see it affecting our national security. Getting to see my work being useful is a big aspect of what keeps me here."

Also, he gets to apply the "pure math" he fell in love with while studying at Illinois Institute of Technology.



Daniel Eckhardt (EE, AMAT '12)

"Math makes sense," he says. "It's one of those weird things: a lot of people find it weird when I say, 'math makes sense,' but it really does. It's beautiful."

In the midst of all that pure math, Eckhardt found fascinating applications. One, in particular, stood out—space plasmas—and he hoped to apply it in a significant way.

There are two types of ways you can move in space, Eckhardt explains. You can go fast with chemical thrusters that put out big, sudden bursts of acceleration. Or you can go slowly and efficiently with electric propulsion.

Eckhardt initially focused on the electric option. When he started at the Air Force lab in 2020, he was the design lead for systems that use solar power to generate enough electricity to transform a noble gas into a plasma propellant for spacecraft.

But he now has to be an expert in

both. After being tapped for a role at the Pentagon as special assistant to the chief scientist of the Air Force—advising principally on issues of space, but also on such things as command, control and communications, and artificial intelligence—he became the laboratory's main technical adviser for all of in-space propulsion in 2023.

He's now the principal investigator for three research projects that focus on optimizing in-space propulsion devices, as well as detecting space debris.

On top of tackling near-term problems—building hardware, then demonstrating it in space—Eckhardt says, "We do basic science, looking at fundamental problems with no current direct application but a time horizon 30 years out."

As far as his career goes, Eckhardt says, it's hard to see one past that.

— *Tad Vezner*

KIRANKUMAR TOPUDURTI (Ph.D. ENVE '88), Portchester, N.Y., has been elected to the National Academy of Construction, and was inducted into the academy on October 12, 2023.

1990s

HITESH K. TRIVEDI (M.S. MAE '90), Fairborn, Ohio, was named a fellow of the Society of Tribologist and Lubrication Engineers at the 77th STLE Annual Meeting in Orlando, Florida. He was appointed a 2023 technical editor of *Tribology & Lubrication Technology* magazine.

SCOTT CONWELL (ARCH '91), Naperville, Ill., was an inaugural Crown scholar in 1986, and his daughter **ANGELICA CONWELL** (B.ARCH. 2nd Year) was awarded the Crown Scholarship in 2022.

MARK ANASTASIO (EE '92), Champaign, Ill., has been named an Institute of Electrical and Electronics Engineers fellow. He was recognized for fundamental contributions to advanced computed imaging.

MATTHEW P. WALSH (LAW '92), Indian Head Park, Ill., was inducted into the Irish American Hall of Fame along with the rest of the Walsh family.

RAMIRO J. ATRISTAÍN-CARRIÓN (M.B.A. FIN '93), Chicago, published a book in Spanish titled *El Dinero en Tu Vida: 100 Consejos Para Lograr Bienestar Financiero* (*Money in Your Life: 100 Tips to Achieve Financial Wellness*), which was released by Archway Publishing from Simon & Schuster.

BENEDICT JONES (MATH '94), Mission Viejo, Calif., started a new career as the director and chief information and technology officer with the Roman Catholic Diocese of Orange, California, on January 2, 2024.

SAURABH VERMA (ME '95, M.S. MAE '99), Buffalo Grove, Ill., moved from engineering manager of lighting to engineering manager of enclosures and controls at Emerson Automation Solutions.

JILL M. WEBB (LAW '96), Chicago, was elected national secretary of the American Board of Trial Advocates in October 2023.

ROBERT BREVELLE (CS '98, M.S. '98), Rowlett, Texas, has been named by the U.S. Department of Veterans Affairs to its list of Top 100 investors that support veterans and veteran-owned businesses. Brevelle was also featured in the Top 100 innovators for 2023 in *Entrepreneurs* magazine on page 64. He was selected due to his successful

track record of early stage technologies and investments. His startups have returned more than \$2 billion to investors. He has previously been named a Top 10 angel investor in Silicon Valley and Dallas-Fort Worth.

ANN RANGARAJAM (M.S. CSEE '98, C.E.R. SE '03, M.S. CS '05), Harvard, Ill., obtained a Ph.D. in technology management at Indiana State University and joined the Department of Information Technology and Management at Illinois Tech as assistant professor in August 2023.

ERNEST BOEHM (M.A.S. CHE '99), Hanover Park, Ill., is working on several world-class methanol-to-olefins and methanol-to-jet process work.

2000s

RENEE CZERYBA (M.S. PHRD '00), Arlington Heights, Ill., received a Bronze Award for Excellence for Human Capital Management from the Brandon Hall Group.

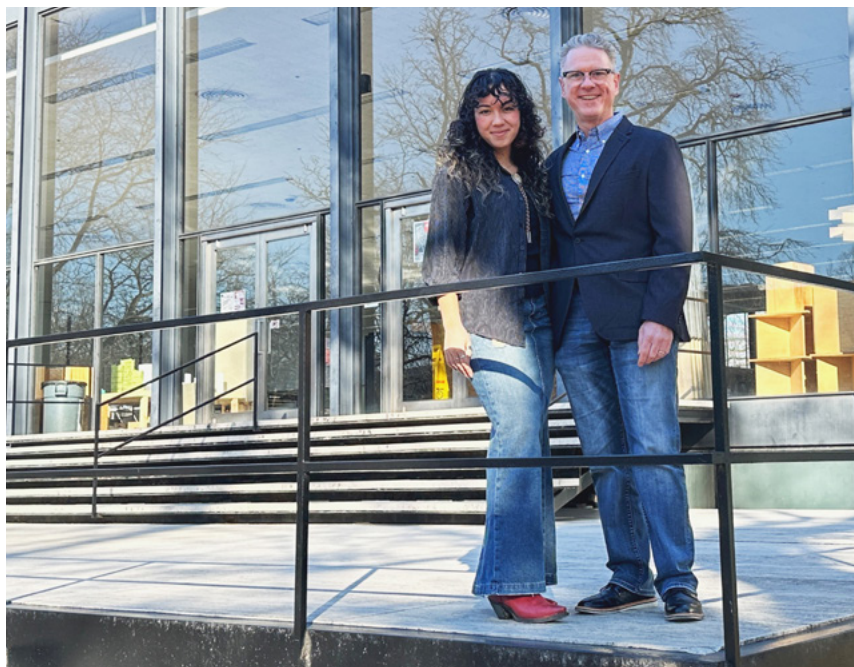
DAVID SALBEGO (M.S. CS '00), Manorville, N.Y., was named the new chief information officer at Brookhaven National Laboratory in Upton, New York, on March 27, 2023.

MICHAEL C. KASDIN (LAW '04), Lake Bluff, Ill., has been recognized by *Chambers USA 2023: America's Leading Lawyers* as one of the top regulatory and transactional insurance attorneys in Illinois.

DAVID VEGA (CS '05), Hickory Hills, Ill., joined Wizards of the Coast as a senior software developer, creating *Magic: The Gathering*, *Dungeons & Dragons*, and *Duel Masters*.

YARED AKALOU (M.DES. '06), Houston, founder of Alcove Group, received a utility patent in 2023 for Alcove Workstation, a laptop case that transforms a personal space into a private workstation. Most notably, the utility patent includes the induction charging capability of laptops.

AMY M. BERIBAK (PSYC '06), Elgin, Ill., married Mark Hartke and combined their children to make a family of five.



[From left] Crown scholars Angelica Conwell (B.ARCH. 2nd Year) and her father, Scott Conwell (ARCH '91), in front of S. R. Crown Hall.

SHAILVI WAKHLU (CPE '07), San Francisco, published a book titled *Self-Advocacy: Your Guide to Getting What You Deserve at Work*, which went on to become the #6 bestseller in the business and negotiation category on Amazon.

2010s

CHRISTOPHER LEE (CE '10), Washington, D.C., was awarded the Delta Beta XI Award and Key from Alpha Sigma Phi Fraternity for sustained alumni service to the fraternity.

SONYA RUSSELL (née Martin) (AE '10), Chicago, was selected as an associate technical fellow with the Boeing Company.

JACK KOSAR (BA '13, M.S. FIN '15), Bartlett, Ill., started a new job at Asbury Research as vice president of investment strategy.

KATERINA BURIANOVA (ARCH '15), Dana Point, Calif., founded her own architecture firm, Katerina Burianova Architecture Inc., which specializes in residential architecture in Dana Point.

MATTHEW R. BUENCONSEJO (FST '15), Deerfield, Ill., accepted a position at the U.S. Food and Drug Administration as a food specialist.

LUIS LARCO (EE '15, CS '15), Palo Alto, Calif., and his wife, **SARA GLADE** (CHE '15, M.A.S. ENVE '15), welcomed their first child, Sofia Victoria Larco-Glade, on December 16, 2023.

MATTHEW RUZA (LAW '15), Hinsdale, Ill., was promoted by his employer Littler Mendelson to shareholder.

DAVID SORRELL, TDM-CP (C.E.R. PMGT '15), Oakland, Calif., received both the 2023 University of California, Berkeley Outstanding Faculty and Staff Adviser Award and the Association for Commuter Transportation 40 Under 40 recognition for repeat-

edly demonstrating a commitment to the community and its needs and for impacting the lives of Berkeley students.

ELIAS VOUGLARIS (M.P.A. '15), Chicago, retired from the Chicago Police Department as a commander after 35 years of service, and has been selected as an expert on policing to the International Criminal Court at The Hague, Netherlands.

ADEEBA JAMAL (M.A.S. CS '16), Fuquay Varina, N.C., had a second baby, a boy, in 2024.

KAYLYNN SELUDO (née Barker) (BIOL '16, M.S. '18), Wadsworth, Ill., and **MATTHEW SELUDO** (CHEM '15) welcomed their first child, Jordan, on November 8, 2023.

NAGENDRA SUBRAMANYA (M.A.S. ITO '17), Chicago, has been working in the supply chain industry at Academy Sports + Outdoors.

2020s

KRISTIN PFEIFFER (M.A.S. FST '20), Naperville, Ill., is currently working at a business-to-business flavor house company that is responsible for sourcing the food and beverage community with flavors, flavor enhancers, and technologies.

RISHI SHUKLA (CS '23, M.A.S. TENR '23), Chicago, started a new position as a software developer at Redmane Technology.

Share Your News

We want to hear from you.
Send us your class note
by visiting
[illinoistechconnect.iit.edu/
page/submit-your-class-note](https://illinoistechconnect.iit.edu/page/submit-your-class-note).

Submissions may be edited for style and brevity.

2024 ALUMNI AWARDS HONOREES

Alumni Medal

James "Jim" Albrecht (FE '53, M.S. '55)

Collens Merit Award

Robert "Bob" Surrette (LAW '97)

Galvin Award

Doug Monieson

International Award of Merit

Jeff J. Hsu (MDM '12)

The John J. Schommer Honor I Award

Heather Olson (ARCH '09)

Lifetime Achievement Award

Edward "Ned" F. Masters (LAW '72)

Arthur Takeuchi (ARCH '54, M.S. '59)

Outstanding Young Alumnus/Alumna Award

Taimoor Khan (ME '12)

Hiranya Pathak (M.S. EE '10)

Linxin Wen (M.P.A. '16)

Professional Achievement Award

Georges Benjamin (BIOL '73)

Robert B. Johnson (CE '69, M.S. '71)

Frank Naeymi-Rad (Ph.D. CS '90)

Allen J. Ottens (German '69)

Anne I. Shaw (LAW '95)



Letter From the Alumni Board Chair

Bob Hoel (BE '70)

Success is typically defined as an achievement in our personal lives, careers, or relationships. However, success takes on a unique meaning to each of us, and no matter what that is, our success is a direct representation of what happens when we reach our full potential to create innovative solutions for the world's most pressing problems.

Going to college is a monumental step in one's journey that can seem exciting, yet daunting, all at once. For some, this time of exploration could even include changing your major until you find the field of study that best fits your potential and passions. Take it from me: before graduating with a bachelor's degree in business administration and building a successful career, I was a chemistry major.

Most students view the concept of college as an ultimate finality. After your diploma is well-earned, you may believe the door to education has closed. At Illinois Tech, though, we are deeply committed to providing endless opportunities to continue to discover and dream as your journey continues.

When each of us chose to attend Illinois Tech, it was not solely for a degree—we came here to kickstart our future! The degree you receive from this institution is the tool you will use to continue to take your own unique steps toward success. It also serves as a key that unlocks a network of more than 80,000 alumni to champion your success. This type of culture is what makes our Alumni Association so inspiring.

It is my hope that you will give back to today's students by serving as an alumni mentor. Each fall Career Services launches a mentorship program focused on connecting alumni to students in similar fields. This program—run through Illinois Tech Connect—provides a great opportunity for alumni to help lead students toward overall success

as they step into the workforce. This is just one of the many valuable ways that you can help today's students, and one in which they find immense value. You can serve as a mentor by filling out the interest form on Illinois Tech Connect at illinoistechconnect.iit.edu/f/get-involved. Please be sure that your Illinois Tech Connect profile has your up-to-date contact information at illinoistechconnect.iit.edu/f/contact-info.

I also encourage you to stay engaged with our university by attending various events that we host. From regional alumni gatherings around the world to campus career fairs and Homecoming, there is an event for everyone! Last fall we hosted our fourth annual Virtual Global Alumni Gathering, where we celebrated Life Trustee Marty Cooper (EE '50, M.S. '57) and the 50th anniversary of his generation-defining invention of the cell phone, organized a panel discussion about artificial intelligence, and connected with students and alumni representing 25 countries. It was an incredible event!

These opportunities put into perspective just how powerful our community is and can be. Each of us was born to be a difference maker in the world, and it all started with the confidence, ingenuity, and guidance of Illinois Tech. Please feel free to email me directly if you have any questions or to simply connect. You never know the impact you can have on a student's unparalleled success by investing your most precious resource: your time.

Bob Hoel (BE '70)

Trustee, Board of Trustees
Chair, Alumni Association Board of Directors
rhoel@iit.edu



James Hill Jr.

Legacy of Nathaniel “Nate” Thomas Honored with \$100,000 Estate Gift

An incredibly generous estate gift from the late James Hill Jr. served as a major catalyst to endow the previously established Nate Thomas Legacy Scholarship at Illinois Tech this spring.

Hill, a highly accomplished certified public accountant and expert financial professional who served as an Illinois Tech Life Trustee, passed away on December 23, 2021. The first African-American auditor at Alexander Grant & Company, he opened his own firm—Hill, Taylor LLC—in Chicago in 1972, which eventually merged with Mitchell & Titus, LLP, where he retired as a partner. An engaged philanthropist and community supporter, Hill served a multitude of organizations in and around Chicago, including Illinois Tech.

Hill took great pride in helping future generations. As a trustee, he pushed Illinois Tech toward recruiting a more diverse student body into finance and business. He felt that he could help make a real impact at the university, and did so by funding an annual scholarship, in addition to supporting Illinois Tech’s Stuart School of Business.

Hill was deeply committed to creating a legacy that could last forever—one that protected the people and causes he cared most about. Through his planned gift of \$100,000, Hill ensured that the Nate Thomas Legacy Scholarship would continue to grow, supporting Illinois Tech students well into the future.

During his 22 years at the university, Thomas held several positions and was instrumental in helping Illinois Tech expand outreach, recruitment, and campus services to African-American and Hispanic students, particularly within the science, technology, engineering, and mathematics

(STEM) fields. A true pioneer for diversity, equity, inclusion, and justice, Thomas was deeply committed to helping ensure a stronger and more inclusive university community. In 1974 Thomas established the Early ID Program to provide access and support to aspiring engineers, computer scientists, architects, and medical experts from diverse backgrounds. As head of minority affairs, he further expanded technical and scientific educational opportunities within African-American communities in Chicago.

Because of his service, Thomas was recognized posthumously with an Honorary Doctor of Engineering at Illinois Tech’s 155th Commencement in May 2024.

“At Illinois Tech, we are standing on the shoulders of more than a century of continuous, inclusive innovation,” says Illinois Tech Interim Vice President for Advancement Beth Campbell. “Both Jim and Nate saw the needs of our world and knew the potential of our community. This generous gift will help continue to build a future in which the generations that follow thrive—generations that will be our living legacies.”

In 2015 the Illinois Tech African American Alumni Association established the Nate Thomas Legacy Scholarship in recognition of the immeasurable impact that Thomas had at the university. Since then, an annual scholarship has been awarded to an undergraduate student each year.

After Thomas passed away in 2020, it became a long-time goal to endow this scholarship. In addition to Hill’s estate gift, other recent gifts supporting the endowment include an estate commitment from alumnus Michael Hill (CS ’82) and numerous gifts from Illinois Tech alumni and friends.

—*Brianne Meyer*



Legacy Planning by Age: Things to Think About

Legacy planning can feel overwhelming. There are so many options, and never enough time! Here's how to plan for the future in each phase of your life:

In Your 20s: Building the Foundation

Putting a few estate pieces in place is a crucial step in establishing your legacy. It's not morbid; it's just being responsible!

- Name your power of attorney for health care
- Name a durable power of attorney
- Name beneficiaries on your accounts—consider adding a charity or organization, such as Illinois Tech

Bonus: Make a list of three people or things that impacted you at Illinois Tech. Whether it was a scholarship you received, a professor who helped you, or anything in between, consider what kind of impact they had on your life.

In Your 30s: A Balancing Act

Juggling career, family, hobbies, and maybe a side gig? Let's cut to the chase. Here are three things to do to set up your legacy in your 30s:

- Name guardians for your kids and/or pets
- Get a basic will in place
- Consider life insurance

Bonus: Create a legacy dream. What would you and your family love to do together—or do for someone else? Big or small, write it down!

In Your 40s: Starting the Conversation

You should be seriously thinking about your estate and legacy at this point. Here are three things you should focus on in your 40s:

- Review your current estate plan—or set one up, if you don't have one
- Organize your accounts and login information
- Start a conversation about legacy with your family

Bonus: Write a "legacy letter" to those you love (and those you listed in your 20s). It's up to you whether you share your heart with them now or later!

In Your 50s and 60s: Strategy, Strategy, Strategy

As you begin to shift your focus toward retirement, now is the time to strategize. How do you want your legacy and estate to relate? Here are three things to think about in your 50s and 60s:

- Assess your retirement assets, and adjust your saving if needed
- Create a charitable giving strategy to maximize non-cash giving opportunities and minimize tax on your estate. By doing so, you can help institutions such as Illinois Tech carry on their legacy, too
- Consider giving to your heirs now—and actively creating memories with them

Bonus: Revisit your family's legacy dream. Have you fulfilled it? If not, focus on what it would take to make it happen.

In Your 70s and Beyond: The Legacy Voyage

You've worked hard to build a beautiful life, and it's important to celebrate it! Here are three things to do in your 70s and beyond:

- Tell your story
- Get your heirs involved in your legacy
- Ensure that your plans and important documents are organized

Bonus: Think back to your years at Illinois Tech. Hopefully, they were some of the most memorable and impressionable years of your life. How can you use your legacy to impact future generations of students, too?

Remember, legacy planning isn't a "one-and-done" kind of thing. You're building your legacy throughout your whole life. By making sensible decisions at each stage, you're ensuring that you leave a legacy that will live on well beyond your years.

To discuss how Illinois Tech can fit into your estate plans, visit iitplannedgiving.org/give or email us at plannedgiving@iit.edu.

POWER THE
DIFFERENCE

OUR CAMPAIGN FOR ILLINOIS TECH

Obituaries

S. R. Cho (M.A.S. CHE '66)

S. R. Cho, an Illinois Institute of Technology Trustee Emeritus who was recognized in South Korea as an international business icon, died in March 2024 at the age of 89. Cho was honorary chairman of the influential Hyosung Group, a South Korea-based industrial conglomerate that contributed greatly to the growth of the country's chemical industry. Cho joined Hyosung in 1966 to assist his father, Cho Hong-je, the company's founder. After inheriting his father's position as the Hyosung chairman in 1982, he led the company until 2017. In the early 1990s he directed the company to develop technologies to produce spandex, allowing Hyosung to dominate the global spandex market. According to *The Korea Times*, Cho was credited with first proposing the necessity of the U.S.-Korea Free Trade Agreement and improved bilateral economic relationships with Japan. Cho was elected to the Illinois Tech Board of Trustees in May 1996 and transitioned to Trustee Emeritus in 2007. He was a member of the Armour Society, and the recipient of Illinois Tech's Distinguished Alumni Award and the International Award of Merit. He also established the S. R. Cho Fellowship Endowment for international graduate students in the Department of Chemical and Biological Engineering, and the Hyosung S. R. Cho Endowed Chair in Engineering to recognize those dedicated to innovative research through significant contributions beyond the classroom and laboratory.

Edward "Ned" F. Masters (LAW '72)

A long-time champion of Illinois Institute of Technology's Chicago-Kent College of Law who went on to become a state's attorney and the chief judge of Will County, Illinois, Edward "Ned" F. Masters died at home on December 14, 2023, at the age of 77. He established the Masters Family Endowment in 2000 to support externships for students studying labor and employment law, an area in which both his daughter and son practiced. To date, more than 100 such externships have been awarded through the Martin H. Malin Institute for Law and the Workplace. Following his retirement from the bench, Masters went into private practice in Will County. In 2005 Masters received a Distinguished Service Award from Chicago-Kent; he also served on the college's Board of Advisors from 2004–2018. He will be honored posthumously with the Lifetime Achievement Award in September 2024.

Richard J. Nogaj (CE '60, M.S. '63)

Richard J. Nogaj, who founded RJN Group, a civil and environmental engineering firm, and later founded several philanthropic nonprofits in Illinois and Florida, died on December 22, 2023, at the age of 85. Nogaj held two patents for municipal wastewater treatment systems, and in 1978 he created CASS WORKS, a maintenance management software program used for municipal water infrastructure systems. He later sold his firm to his employees via a stock ownership plan in 1995. He founded the RJN Foundation, which donated nearly \$1 million to local, national, and international not-for-profit organizations, including 159 civil and environmental engineering scholarships. He and his wife, Florence Nogaj, founded several other nonprofits, including the DuPage Habitat for Humanity in Wheaton, Illinois, and the Harvest for Humanity and Jubilation Development Corporation in Immokalee, Florida, which sponsored affordable home ownership for 89 families. Nogaj spoke at numerous events and forums on the topics of affordable workforce housing, immigration reform, and the fair food movement.

Robert W. Porter

Robert W. Porter, who taught high-speed and compressible flows as a professor in Illinois Institute of Technology's Armour College of Engineering, passed away on January 14, 2023, at the age of 85. As part of a growing research focus on heat transfer and power transmission, Porter chaired and directed the national American Power Conference at Illinois Tech for many years. He taught at the university for more than 20 years before retiring in 2001.

In Memoriam

Alumni

Ralph Pearson (AS '40)
John "Buck" Larry Donoghue (CE '41)
Sherwin P. Asrow (CE '44)
Leonard F. Ault (IE '48)
Martin Leonard Black (IE '48)
Herbert M. Sachs (EE '48, M.S. '58)
Bert J. Toppel (PHYS '48, M.A.S. '50, Ph.D. '52)
Lawrence Margol (EE '49)
Glen A. Seegers (ME '49)
Bernard "Bernie" P. Kunka (ME '50)
Carl S. Matson (CHE '50)
Donald Fredric Frank (IE '51, ME '58)
Felix S. Lucas (BE '51)
Dennis F. Beatty (CE '52)
Donald H. Ebert (EE '52)
Harry F. Kotecki (EE '52)
Lawrence E. Nelson (ME '52, M.S. EMGT '59)
Charles M. Sather (ME '52)
Elaine M. Seubert née Krause (HEC '52)
James "Jim" Edward Stice (M.S. CHE '52, Ph.D. '63)
James E. Walenga (EE '52)
Raymond Wechman (IE '52)
Morton R. Borkan (ARCH '53)
Reed B. Varley (FPSE '53)
Milton J. Becker (M.S. BIOL '54, Ph.D. '65)
Anthony "Tony" N. Candido (ARCH '54)
Edmund "Ed" G. Filetti (ME '54)
Edward H. Keevins IV (CE '54)
Robert C. Sommerfeld (ENGL '54)
Bernard Hammer (BCHM '55)
William "Bill" L. Johnson (EE '55)
Franklin I. Kral (LAW '55)
Peter G. Kronich (ME '55)
Thomas F. Morrissey (FPSE '55)
Albert W. Smith (FPSE '55, LAW '69)
Victor J. Guarino (ME '56, M.S. MAE '68)
Daymond R. Speece (M.S. EE '56)
Wayne C. Bryan (ARCH '57)
Seiko Inuma (EE '57)
Edward C. Kokkelenberg (CHE '57)
Paul Max Richter (CE '57)
Richard S. Pluth (BE '58)
John Soss (EE '58)
Robert N. Stollfuss (ME '58)
Leroy "Lee" William Brown (FPE '59)
Leonard O. Gillis Jr. (DSGN '59)
Raymond A. Guenther (PHYS '59,
M.A.S. '62, Ph.D. '69)
Thomas "Grant" Kepner (FPSE '59)

Roger Allan Logeson (ME '59)
 John L. Mahan (EE '59)
 Coleen Murray née Byrne (ME '59, M.S. '63)
 Kenneth W. Jacobs (CE '60)
 Richard J. Nogaj (CE '60, M.S. '63)
 Thomas J. Provencher (ME '60)
 Charles J. Sener (IE '60)
 Ted Ewalt Lewis (MET '61, M.A.S. BA '63)
 Ganesh Prasad Mohanty (Ph.D. MET '61)
 John J. Moloney (MATH '61)
 Peter A. Ottesen (EE '61)
 Ronald Arthur Smith (EE '61)
 Richard J. Drogosz (ME '62)
 Francis "Frank" E. Palma (M.S. PHYS '62)
 Arnold I. Caplan (CHEM '63)
 Arnold "Arnie" I. Epstein (ME '63)
 Ronald A. Johnsen (CHE '63)
 John M. Klobucnik (UNK '63)
 Leslie G. Konley (EE '63)
 John George Carkeek (EE '64)
 Peter J. Fasone (LAW '64)
 John G. Jones (Ph.D. CHEM '64)
 Robert G. Jump (CHE '64)
 Peter E. Ostrander (PHYS '65)
 Stephen V. Walsh (EE '65)
 Brian C. Elliott (ME '66)
 Harry L. Rooker (ME '66)
 Jerome A. Roth (Ph.D. CHEM '66)
 Eugene "Gene" W. Sullivan (EE '66)
 Thomas H. Adamson (M.S. MED '67)
 Dennis L. Blewitt (LAW '67)
 William "Bill" G. Dinchak (CE '67)
 William F. Gavenda Jr. (EE '67)
 Michael S. Grzeskowiak (EE '67)
 Jay B. Rohr (MATH '67)
 John T. Stephens (BE '67)
 Virginia A. Fenley (SOC '68)
 Arthur B. Israel (M.S. CHE '68)
 Charles W. Redmond (M.S. CHE '68)
 Martin A. Ostrego (EE '69)
 James J. Bradley (CHE '70)
 Robert C. Dartsch (M.S. MED '70, CSED '77)
 Daniel A. Di Sabato Sr. (LAW '70)
 Gerald Jakubowski (EE '70)
 Joseph E. Kus (MAE '70, M.A.S. BA '73)
 Chester T. Lewandowski (MATH '70)
 Roy Lofstrom (BE '70)
 Raymond W. Pryor (DSGN '70)
 William F. Saylor Jr. (BIOL '70)
 John W. C. Weigand (EE '70)

Lee M. Brunka (EE '71, M.S. '74)
 John "Jack" E. Keegan (M.S. SOCED '71)
 Mary Grace O'Brien (M.S. SOCED '71)
 Paul H. Azzaline (MAE '72)
 James J. Hilburger (MGT '72)
 Edward "Ned" F. Masters (LAW '72)
 John S. Adler (LAW '73)
 Cheryl M. Palesh (M.S. ENVE '73)
 James T. Young (MATH '73)
 Roger H. Anderson (MAE '74)
 Neal H. Kuhn (ECON '74)
 Daniel F. Murray (LAW '74)
 Newal K. Agnihotri (M.S. EE '76)
 John B. Dale (LAW '76)
 John P. Ley Jr. (LAW '76)
 William R. Mooney (MGT '76)
 Leroy A. Zostautas (PHYS '76)
 Judith L. Quain (SOC '77)
 James E. Gajda (LAW '78)
 David J. Berry (M.S. REHC '79)
 Richard A. Marsh (LAW '79)
 Martin "Marty" W. McCullough (MGT '80)
 Duane C. Bennett (MGT '82)
 Thomas "Tom" R. Eisenbart (M.S. EE '82)
 Robert J. Corke (EE '83, M.S. '90)
 Edward C. Erwin III (LAW '83)
 Michael J. Clemetsen (FPSE '84)
 James M. Jensen (LAW '86)
 Joann C. Butler (LAW '87)
 Thomas "Tom" L. Bartlett-Svehla (LAW '89)
 Ester Jones (BA '95)
 Clair L. Penner (LL.M. '95)
 Jason K. Zachary (LAW '99)
 Patrick Russell Fedewa (M.ARCH. '09)
 Mary Nolan (WDAD '11)
 Courtney Schrey (M.A.S. MCHM '18)
 Jacob T. Grant (CS '23)
 Mohit Sangram Hota (M.S. CS '23, Ph.D. '24)
 Venkatarao Pulla (M.A.S. CS '24)

Faculty and Staff

Patrick D. Ginty
 Patricia Bernice Kubistal
 Erma J. Thomas

Friends

Lorna C. Nemcek
 James J. O'Connor Sr.
 Robert W. Porter

Take Five

Maurice Dawson, assistant professor of information technology and management and director of Illinois Tech's Center for Cyber Security and Forensics Education (C2SAFE), researches and travels the world speaking and advising on cybersecurity as a global issue, particularly in developing countries.

Q: We hear a lot about global cybersecurity concerns. How fast are they growing?

It's extremely fast as technologies continue to modernize. COVID-19 has shifted a lot of things, a lot of things are hybrid. You think about people working virtually, now they're having to trust the infrastructure of the countries they're living in. Are [those countries] securing data and information in the global supply chain? When you think about privacy laws in Europe, when you're doing business with these countries, you have to be compliant with the General Data Protection Regulation (GDPR) to do work with them.

Q: What are some of the challenges and vulnerabilities that developing countries have when trying to integrate cybersecurity programs and policies?

A lack of trained manpower and weak internet policy laws that protect the people. Some countries are dictatorships where everything is controlled by the government. The legal regulations are slow to catch up. As technology advances, the existing regulations lag behind, failing to offer sufficient cybersecurity measures, thus exposing organizations and individuals to vulnerability. When I was in Gambia several years ago, for instance, they used to have one individual, and his focus was to make sure he stayed in power. They had technology, but there was no national cybersecurity policy. And when these countries do train people, those people often leave for greener pastures.

Q: Why is it important to be concerned about cybersecurity in developing countries?

As we are trying to expand our global reach and do business with developing countries, we need to make sure that we are safeguarding our data as well. When you look at a supply chain, if there is one weak point, that point can be exploited.

Q: What are some examples of developing countries that are making great strides in advancing their cybersecurity capabilities?

I mentioned that it seems like everybody's having issues with manpower due to emigration. An exception is Botswana, where student citizens get land and money for school. They're well educated, and they often stay. Paraguay's Instituto Nacional de Tecnología, Normalización y Metrología is modeling the United States' National Institute for Standards and Technology cybersecurity standards as these are baseline standards. Estonia was brought down for two weeks—the government, banks, infrastructure, everything—over the removal of a Russian statue. They now teach computer programming at an early age.

Q: What are some of the newest methods or tactics of a cyberattack, and how can we counter them?

With tools like artificial intelligence, scammers in non-English-speaking countries can now write messages that sound more authentic. Then there's technology that people just allow on their phones. The Blu Phone sent users' personal texts to a server in China. TikTok gets control of apps on your phone that it doesn't need. You worry, "They can hack this, hack that," but do you realize you've downloaded an app that lets them do that? People need to read end-user agreements! You could ban TikTok, but people could still jailbreak their phone and put it on. The biggest thing is educating people—awareness about these particular items, even in this country.



Before You Go

An Illinois Tech student receives information about graduating during Graduate Salute on April 23. Graduate Salute is an opportunity for university leaders, graduates, faculty, and staff to mingle, take photos, and celebrate the achievement of students who are about to graduate before the 155th Commencement ceremony, which took place on Saturday, May 11.

Photo by Bonnie Robinson



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