



Detailed Approach

Seeing the full picture, Alzira Maldonado Protsishin (M.A.S. ARCH '14) has set herself up for success

In Service of 'Something Bigger'
A Code Worth Cracking
(Sound)ing the Alarm



A Letter from Raj Echambadi

It is the dawn of a new era in higher education, one that is being driven by a technological transformation that is changing what we do and how we do it. The forthcoming, technology-driven Fourth Industrial Revolution means there is a need to educate the next generation of innovative tech leaders who will shepherd us forward.

Illinois Institute of Technology was born out of a similar challenge more than 130 years ago, when minister Frank Wakeley Gunsaulus delivered his “Million Dollar Sermon.” Gunsaulus called for the support to build a school where students of all backgrounds could prepare for meaningful roles in a changing industrial society. The support of Philip Danforth Armour Sr. ensured that vision could become a

reality, serving as the foundation upon which our university remains focused: harnessing the power of collective difference to advance technology and innovation for all.

Earlier this year, during Homecoming, I was privileged to deliver the “Billion Dollar Sermon” with Michael P. Galvin (LAW ’78), chair of the Board of Trustees. This provided the space for us to highlight the opportunity that Illinois Tech has to create a new type of university for the twenty-first century. It also served as the official relaunch of Power the Difference: Our Campaign for Illinois Tech, a \$1 billion fundraising campaign that is focused on helping the university support and enhance the student experience; to invest in faculty, facilities, and educational

programs; to develop and deliver new, world-leading research programs; and to ensure that Illinois Tech serves as the premier technology-focused university in Chicago.

As we sit on the precipice of another industrial shift, Illinois Tech must again rise to meet the needs of the time. We are uniquely positioned to meet this challenge. Our highly relevant, tech-driven curriculum and one-of-a-kind Elevate program, which guarantees hands-on experience outside of the classroom and provides academic and career mentoring, ensures that Illinois Tech students stand out after graduation. I’m happy to share that this is resonating with students: we welcomed the largest class of first-year students in recent history to start the fall 2022 semester.

Our alumni are vital to our work. Take Alzira Maldonado Protsishin (M.A.S. ARCH ’14). Born in Ukraine and raised in Colombia, Alzira moved to Chicago to pursue her architecture studies at Illinois Tech. Now a senior architect at EXP, she was a project designer on multiple Chicago Transit Authority elevated “L” train stations, including the 95th Street Red Line station. Her work earned her the American Institute of Architects Chicago Dubin Family Young Architect Award in 2021.

You’ll read more in this issue about the positive impact that Alzira has made on her community, as well as communities in Chicago and the Illinois Tech community, and the important work that so many of our alumni are doing to benefit others.

That is the impact of an Illinois Tech education, and I look forward to continuing our work to ensure that future generations will make the same impact.

Sincerely,

Raj Echambadi
President



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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
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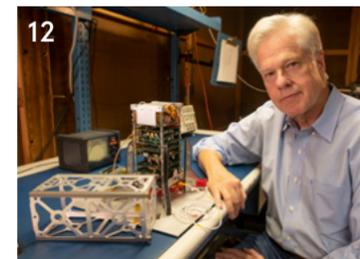
Alzira Maldonado Protsishin (M.A.S. ARCH ’14) never wavered in pursuit of her dreams—and, with the support of her family, she’s impacting Chicago, and beyond, through architecture.



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A personal experience helped Halcyon Lawrence (M.S. TCID ’10, Ph.D. TCOM ’13) realize her

work as a technical communicator shouldn’t be solely visual—it needed to explore sound.



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In seemingly a blink of an eye, James Flynn (EE ’77) went from working in communications to helping lead a team of students to build a satellite that successfully orbited in space.

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A love of health care and software has made Saurabha Bhatnagar (CS ’02) uniquely qualified for his latest challenge: developing a platform for health care tech apps and software systems.

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A life of service was ingrained in Don Means Jr. (EE ’89) from childhood; his parents provided the template that he followed to become a leader for the Defense Information Systems Agency.

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Letters

A Golden Anniversary Missed

Having reconnected with Illinois Institute of Technology via publications such as Illinois Tech Magazine, **Virgilio Caballero (M.S. ENVE '72)** expresses his disappointment about having to miss this year's 50th reunion.

I am enjoying the current school news that bring reminiscences from the time that I was enrolled in the environmental engineering program. To this day I feel very fortunate for having chosen IIT for my graduate studies, which was the key that opened many doors for me as an immigrant during my successful 44-year professional career that started as a part-time draftsman in an engineering firm while attending school [and ended as] the director of waste water operations in a central Florida municipality.

A 50th reunion is a milestone that not many people can attend for many reasons, particularly during these pandemic years. For those of us who are 70-plus years of age, it is truly an important event in our lives, and that is the reason that I feel terribly sorry after hoping to attend. An unavoidable schedule conflict for that date prevented me from participating in such a memorable celebration, and the sad part is that I missed my one-time 50th reunion.

A Plan to Stick To

A World War II veteran who served in the United States Navy, **Charles Ticho (EE '48)** used his G.I. benefits to attend Illinois Institute of Technology upon his return home to Chicago. He highlights some of his experiences as a student at Illinois Tech, specifically in pursuit of his goal to graduate in three years to make up for the time he spent in the service.

IIT had a somewhat primitive method of registering for classes. On the specified registration day each department would set up a table in the gymnasium. If you wanted to sign up for an English class, you got in line in front of the English department table and hoped that, by the time you got to the head of the line, the class that you wanted was still available. You would then rush to the next line to sign up for the next course and so on until your schedule was complete. This system did not present a big problem for those signing up for the normal 16 credit hours per semester. If one of your preferred classes was already full, you nearly always managed to find an alternate class that would fit into your schedule. However, when you were trying to squeeze 22 or 24 credit hours into your program, as I was, a careful strategy had to be prepared.

Every semester, no matter how well

I planned, there would always be one or two classes that were already filled by the time I got to the table. To solve this dilemma I developed a bit of subterfuge. I'd go up to the professor who was teaching one of the closed classes and say: "I spoke to the head of your department and he said that, if it is all right with you, were I to join your closed class, it would be OK with him." What could the professor say? I had already received the department head's approval, so he could hardly object. He always agreed. I would then rush over to the department head and say: "Professor so-and-so said if it is OK with you it's OK with him if I join his closed class." Invariably the department head approved, and I had the class.



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LEADERSHIP

History, at Your Fingertips

Innovation—in more ways than one—is on display in the east lobby of Michael Paul Galvin Tower, which is now home to a physical-digital interactive experience that honors the impact of the Galvin Family on Illinois Tech and provides a chance for visitors to better understand the university's founding mission.

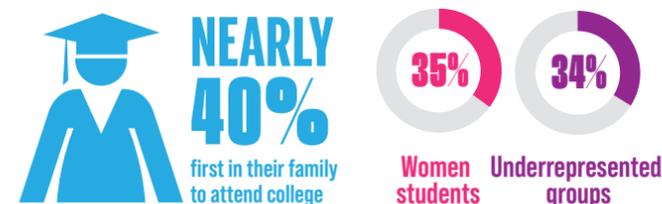
A motion wall of screens animates in front of visitors while highlighting information about the building's namesake, Michael P. Galvin (LAW '78), the chair of the Board of Trustees, the Galvin family and its decades of support to the university, and Motorola, which was founded by Michael's grandfather, Paul V. Galvin.

The interactive display also features a window projection and touchscreen experiences, which allow visitors to add their stories. —*Andrew Wyder*

STUDENT SUCCESS

Soaring to New Heights

The university welcomed its largest class of first-year students in recent history when the fall 2022 semester began in August. Here's a little more about the newest class of Scarlet Hawks:



LEADERSHIP

Leading into the Future

A trio of Illinois Tech colleges are currently under new leadership, including the appointment of a new dean.

Jennifer deWinter has been appointed as the new Lewis College of Science and Letters dean. Most recently, deWinter was a professor of rhetoric and the director of Art and Design at Worcester Polytechnic Institute. As a researcher, deWinter focuses her work on experience design in interactive media and game development and production management. She replaced Christine Himes, who served as Lewis College dean for more than nine years.

Two other Illinois Tech faculty members are guiding colleges through leadership changes.

Upon the retirement of John F. O. Bilson as dean of Stuart School of Business, Professor of Economics Liad Wagman was chosen to serve as Stuart School's interim dean. Wagman has been at Stuart School for 13 years, where he has taught at the undergraduate, graduate, and doctoral levels; conducted a wide array of research across multiple

disciplines; and helped to pioneer Stuart School's online initiatives, an increasing area of focus for the university.

Kevin W. Cassel is currently the acting dean of Armour College of Engineering in place of Carol and Ed Kaplan Armour College Dean of Engineering Endowed Chair Kenneth T. Christensen, who is serving as the interim provost. Cassel has served on the Illinois Tech faculty for more than 25 years, with a primary appointment in the Department of Mechanical, Materials, and Aerospace Engineering. —*Andrew Wyder*



Jennifer deWinter Liad Wagman Kevin W. Cassel



[From left] Illinois Tech President Raj Echambadi, Chicago-Kent College of Law Dean Anita K. Krug, Richard Conviser, and Illinois Tech Board of Trustees Chair Michael P. Galvin (LAW '78)

LEADERSHIP

An Honor Befitting the Man

Illinois Tech unveiled its renamed downtown campus building, Conviser Law Center, at a formal dedication ceremony in recognition of Richard J. Conviser's lifelong service to Chicago-Kent College of Law and the legal community. Conviser is also a longtime professor of law at Chicago-Kent and a co-founder of BARBRI, the world's largest bar-exam preparation course.

"Chicago-Kent is a leader in innovation," Conviser said when the building's renaming was originally announced in February 2020; the dedication ceremony was later delayed due to the COVID-19 pandemic. "The school's forward-thinking approach to providing a quality legal education that prepares students to practice law in this rapidly changing legal industry is truly outstanding among its peers." —*Tad Vezner*

Headliners



“I think the backyard is a place of invitation and the front yard is a place of spontaneous inaction, a place where maybe you didn’t anticipate seeing a friend or a neighbor, but because you’re visible in the public, you may encounter your neighbors.”

—Professor of Landscape Architecture Ron Henderson highlighting, for Chicago TV station Fox 32, how the front yard has become a social gathering place



“Everyone knows what it means to be depressed or (have) anxiety, but the fundamental thing about stigma is difference. While one may get depressed occasionally or a bit euphoric once in a while, most people don’t know what it’s like to be in the throes of a manic episode.”

—Distinguished Professor of Psychology Patrick Corrigan discussing the stigma around manic episodes in USA Today



“One of the biggest misconceptions is that people think that they’re not a target for hackers or malicious actors. All of us are connected today...We have to understand that us being continuously connected, we are vulnerable because we have so many devices.”

—Professor of Information Technology and Management Calvin Nobles discussing cybersecurity misconceptions on Chicago TV station ABC 7



STUDENT LIFE

A Squirrely Story

In February Illinois Tech Public Safety captured an elusive criminal: Squirrel Boss, a ceramic lawn ornament that was detained for trespassing, but would be released “for good behavior” to the owner of the @iit.squirrel Instagram account, a channel that has exploded in popularity on campus and has led to the creation of a popular student organization.

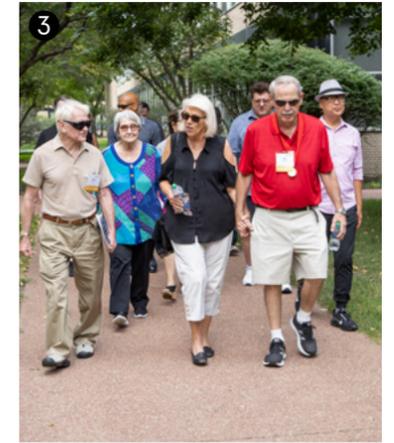
When Leah English (PHYS, ASPY 2nd Year) needed a release from her first-year studies, she strolled campus with a mission: to find and photograph friendly critters on Mies Campus. She posted fun photos of squirrels on social media, but only if they were on Illinois Tech grounds. “My favorites are when they’re eating food,” English says.

English’s Instagram account, created less than a year ago, caught students’ attention—far more than she had imagined. More than 700 followers send or post their own squirrely candid captures. The account garnered so much community attention that English decided to create a student organization, Squirrel Club, in April.

The email list is now 150 members strong, and the club has built a friendly community of participants that English never imagined would happen. She thinks it’s a way for people to escape the urban bustle of a major metropolis, if only for a few minutes. “There’s a lot of nature on campus for being in the middle of Chicago,” English says.

A ceramic squirrel, a gift from her grandmother’s yard sale shopping spree, became a hide-and-peek hunt for her followers as students found the squirrel, snapped a picture for the account, and hid it elsewhere on campus for others to find.

It made its way to the 19th floor of Michael Paul Galvin Tower, where Public Safety grabbed the lawn ornament. The squirrel disappeared over the summer, so a replacement squirrel will soon be purchased. English also plans to have Squirrel Club activities and outings in the spring after she gets used to running the organization. —*Thaddeus Mast*



EVENTS

Homecoming 2022

1. Athletics Hall of Fame

The inaugural Athletics Hall of Fame ceremony was held to honor a special group of athletics alumni and former coaches and administrators who have left an inspiring legacy at Illinois Tech. The event was emceed by Athletics Advisory Board Chair Jackie Sokolowski (PSYC '05, MBA '14).

2. Michael Paul Galvin Tower Community Celebration

The Illinois Tech community gathered for a celebration as it unveiled the first physical-digital interactive experience on campus to honor Board of Trustees Chair Michael P. Galvin (LAW '78) and his family. Learn more at www.iit.edu/galvin-interactive.

3. Homecoming Walking Tour

Illinois Tech alumni from all classes came back to reconnect during a walking tour on campus led by Cynthia Vranas Olsen (M.S. ARCH '01, Ph.D. '17).

4. Golden Reunion

The newest members of the Golden Society celebrated the 50th anniversary of their graduation from Illinois Tech. Pictured are members of the class of 1972 and before.

5. African-American Alumni Association Social

Illinois Tech alumni and friends connected on campus during the African-American Alumni Association (4A) mixer.

6. Power the Difference Campaign Celebration

University leadership, faculty, staff, and alumni celebrated the announcement of the historic \$1 billion fundraising goal for Power the Difference: Our Campaign for Illinois Tech, including [from left] Board of Trustees Vice Chair Tom Lanctot, Trustee John P. Calamos Sr. (ECON '63, MBA '70), University Regent Craig Duchossois, and Vice President for Advancement Ernie Iseminger.

See more photos of Illinois Tech Homecoming 2022 at <https://flic.kr/s/aHBqjA7ZBc>



LEADERSHIP

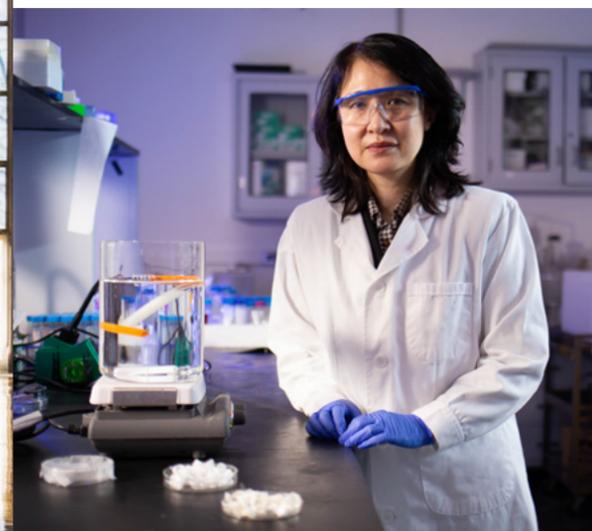
Leaders of the Flock

A dozen former student-athletes, coaches, and administrators who were key in shaping the Illinois Tech athletics program were inducted into the inaugural Athletics Hall of Fame class as part of the 2022 Homecoming celebration on September 16, 2022.

The creation of the Athletics Hall of Fame was spurred by the Athletics Advisory Board in 2019, which was tasked with growing the student-alumni experience. The board saw a need to recognize the past and those who paved the way for current and future student-athlete success.

Here's a look at the first class of inductees:

- **Liam Barrett (BA '13)**, Men's Soccer—A two-time academic all-American, Barrett broke Illinois Tech and Chicagoland Collegiate Athletic Conference (CCAC) records for goals and points, twice being named the CCAC Player of the Year
- **Jim Darrah**, Coach—Darrah coached baseball for 25 years, beginning in 1978, and was three times named the CCAC Coach of the Year; he was also named the National Association of Intercollegiate Athletics (NAIA) State and Region Coach of the Year
- **Ted Erikson (CHE '52)**, Men's Swimming—A standout swimmer at Illinois Tech, Erikson would go on to break world speed records, including swimming the English Channel round-trip in 1965 in a time of 30 hours, 3 minutes
- **Ed Glancy**, Coach—After playing in the Major League Baseball farm system, Glancy coached the baseball team from 1947–71, served as athletics director until 1983, and is credited with obtaining the first student-athlete scholarships
- **Lauren Joyce Hensel (PTC '06, MPA '17)**, Women's Volleyball—After a standout career at Illinois Tech, where she was a two-time NAIA All-American, Hensel went on to coach the Robert Morris University men's and women's volleyball teams
- **Arthur Keating (ME 1916)**—The captain of the football, men's basketball, and track team at Armour Institute of Technology, Keating offered support as a university trustee and donor that led to the development of the university's athletics facility named in his honor
- **Gerald "Jerry" L. Maatman Sr. (FSPE '51)**, Men's Baseball—A star outfielder at Illinois Tech, Maatman had a successful professional career that included time spent as chair of Illinois Tech's fire protection engineering department and serving as CEO of Kemper Insurance
- **Dennis Matuch**, Coach—Matuch coached the swim team for 25 years while earning international accolades, including a world-best time for a 40-kilometer pool swim in 1963, and was inducted into the International Marathon Swimming Hall of Fame
- **John Olin (ME '61)**, Men's Basketball—Olin is one of the men's basketball team's all-time leading scorers, including scoring a school-record 41 points in a single game, and a distinguished Honor I recipient
- **Corinne Trtan (CE '02)**, Women's Basketball—A standout on the hardwood who was named the CCAC Freshman of the Year and finished her four-year career with a record 1,611 points, Trtan had her jersey retired shortly after she graduated
- **John J. Schommer (CHE 1912)**, Administrator—One of the Big Ten's first great basketball players, Schommer transferred to Armour Institute to play three sports and later oversaw the development of its earliest athletics programs
- **Bernard "Sonny" Weismann**, Administrator—Weismann was a coach at Armour Institute and later served as athletics director at Illinois Tech from 1928–71; over his 43-year career, the athletics program grew from its infancy into resembling today's department —*Thaddeus Mast*



Rong Wang

HEALTH

Your Saliva Could Reveal Secrets of Your Dental Health

When a dentist says you are one of the millions of Americans with a gum infection, it's usually time to schedule restorative dental work. But the secret to catching tooth decay early could lie in your spit.

Illinois Tech Professor of Chemistry Rong Wang is leading a team that is tasked with detecting periodontitis, a gum infection, before major dental work is needed.

"It's not life or death, but it is close," says Illinois Tech Assistant Professor Abhinav Bhushan, a co-principal investigator on the project. "It really impacts people's quality of life, and it's also very expensive."

The group's solution is to compare the saliva samples of human subjects who either do or don't have periodontitis and search for biomarkers associated with the disease. They don't expect to find just one signifier—rather, the researchers are looking to identify a collection of bacteria, proteins, metal ions, and enzymes that are associated with the presence of tooth decay.

The team is developing a device that can then test a saliva sample for the presence of the identified biomarkers.

—*Simon Morrow*

COMPUTING

\$20 Million Grant Drives IDEAL Research in Data Science

A Chicago-based research coalition that includes a pair of Illinois Tech researchers is accelerating innovations in data science with a share of a five-year, \$20 million grant from the National Science Foundation.

The Transdisciplinary Research in Principles of Data Science (TRIPODS) Phase II program brings together scientists and engineers from different research communities to further the theoretical foundations of data science through integrated research and training activities. Jinqiao "Jeffrey" Duan, professor of applied mathematics, and Binghui Wang, assistant professor of computer science, are part of the coalition that received a TRIPODS grant.

Duan and Wang will conduct data science research with the Institute for Data, Econometrics, Algorithms, and Learning (IDEAL), a consortium of more than 50 Chicago-area researchers from Northwestern University, the University of Chicago, the University of Illinois Chicago, and

Toyota Technological Institute. IDEAL focuses its research on key aspects of data science foundations across computer science, electrical engineering, mathematics, and statistics in fields such as economics, operations research, and law.

"This institute provides a platform for conducting research and training in the mathematical foundation of data science, with expertise, motivation, and inspiration from people of diverse backgrounds," Duan says.

IDEAL's proposal includes a strong public outreach component to impact research and educational infrastructures to engage a diverse population from underrepresented communities engaged in data science. This includes conducting public lectures and exhibits through a partnership with the Museum of Science and Industry, as well as conducting workshops with local high school teachers through a partnership with Math Circles of Chicago. Direct workshops with undergraduate and high school students are also a part of the strategy. —*Casey Moffitt*



Jinqiao "Jeffrey" Duan [center]

Designs on a Dream

By Linsey Maughan

In 2021 Alzira Maldonado Protsishin (M.A.S. ARCH '14) won the American Institute of Architects Chicago (AIA Chicago) Dubin Family Young Architect Award—a title that, on the surface, might suggest a seamless ascent to notoriety. But Maldonado Protsishin is someone who knows what it is to fight for a dream—to rise as a minority woman in a male-dominated field, and to build a career, and a life, a world away from where she began.

Born in what is now Kyiv, Ukraine, and raised in Bogotá, Colombia, Maldonado Protsishin is the daughter of two structural engineers. Her parents divorced when she was young, and she split her time between both of their houses growing up, sometimes tagging along on their work projects. The influence of their careers, she says, was significant.

When she became a mother at a young age, Maldonado Protsishin stayed true to the dreams for her career with the support of her family.

“I finished high school with the help of my parents,” she says. “I wouldn’t be anywhere close to where I am [otherwise]—it’s because they helped me a lot, especially my mom. Going to college later, it was a 24-hour job basically. It was taking [my son] to kindergarten, going to class, picking him up, doing homework, dinner, getting him in bed, and then after that I got to study and do my homework for school as well. It was busy, I have to say, and challenging at times. I don’t think I would change a thing about it.”

When Maldonado Protsishin decided to study architecture in college, she was fully aware of the gender imbalance that exists within the field. Her mother’s professional success inspired her decision.

Fourteen years ago Maldonado Protsishin’s mother’s employer offered her an opportunity to move to the United States for work, and she took it. Her mother now lives in Houston.

PHOTO BY TIM KLEIN



Alzira Maldonado Protsishin inside the 95th Street/Dan Ryan Intermodal Chicago Transit Authority station’s north terminal.

“She moved here knowing little English, and while working she was studying to learn the language,” Maldonado Protsishin says. “Today she is a licensed structural engineer in three countries. I have never seen her give up on anything. She just plowed through the adversities to access better opportunities for herself and her family.”

After earning her bachelor’s degree in Colombia and working in Bogotá, Maldonado Protsishin moved with her son to Chicago. She enrolled in Illinois Institute of Technology’s Master of Architecture program, and her son enrolled in middle school. Given her responsibilities as a single mother, she went to school while also working part-time.

“It is the way I accomplished staying here—getting an internship so I could have an offer after graduation and have my [residency] paperwork,” she says. “I was in a different mindset than everybody else [in my graduate program] because I already had so much responsibility. I had to think way, way far ahead.”

At Illinois Tech, Maldonado Protsishin took a graduate studio course with instructor Thomas Hoepf, who also worked at EXP, a global architecture and engineering firm headquartered in Chicago. The two then became colleagues when Maldonado Protsishin was hired into an architect internship at the firm. That position served as a catalyst for her growth within the company, and she still works for EXP, currently as a senior architect.

“The group that I am in at the firm mostly does public projects, so a lot of transportation infrastructure, Chicago Transit Authority projects, airports, [and projects with] federal agencies like [the U.S. General Services Administration] and [the Federal Aviation Administration]. Those are the type of projects that I really like, working on public building projects,” she says.

Maldonado Protsishin’s projects have

“It is incredible for me, for my mom, for my family, to have that recognition [through the AIA Chicago award] in a different country and after all of the effort that it took. To me it’s mind blowing.”

—Alzira Maldonado Protsishin

ranged from working on the redesign of the 95th Street/Dan Ryan Intermodal CTA station; designing a new courthouse in the Northern Mariana Islands, a U.S. commonwealth located in the Pacific Ocean south of Japan; and, most recently, designing air traffic control towers in North Dakota and South Carolina.

“In the courthouse and many of the CTA projects, I was a project designer,” she says. “I work on the front end with the client visualizing the building and addressing the needs of the end users. I do community outreach and town halls when we present the project to the community, and stay involved on the project for coordination of the design that was approved by the client and work on key details, which I like.”

“She’s always been involved in all phases of the work, as all architects are, but her passion has been design, and her design abilities are just superb,” Hoepf, now a design director at EXP, says of Maldonado Protsishin. “She has that sensibility about the big picture down to the craft and detail. She is a critical part of our collaborative team of architects and engineers, and she is respected as such.”

Outside of work, Maldonado Protsishin has gotten involved with a cause dear to her heart: empowering other women

in the development of their careers as architects. One way she has done so is by volunteering with Arqutina, a nonprofit that provides mentorship to Latina women who are preparing to take their licensure exams to become architects.

Alicia Ponce, founder of Arqutina, has witnessed Maldonado Protsishin’s drive in this area firsthand.

“[With our mentees], we talk about family, partners, and mental health—all of that comes into play when you’re trying to take an exam,” Ponce says. “Somebody like Alzira can share her story. She meets with a mentee and also volunteers for our planning committee. She hit the ground running being a mentor and key member for Arqutina, and she’s always really happy, which makes it even better.”

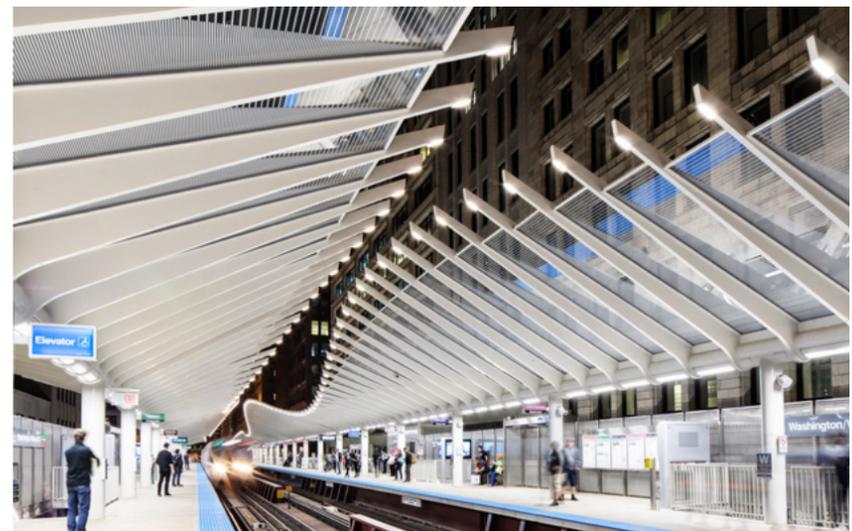
Maldonado Protsishin has made a home for herself and her son in Chicago’s Old Town neighborhood. Her son is a business major completing his final year of college in Chicago. Career-wise, Maldonado Protsishin says she remains deeply interested in public building projects that can serve the next generation. Her greatest motivator, she says, is still her family.

As she looks forward, the AIA Chicago award that she received is opening new doors.

“I’m just going forward for me and my son,” she says. “It is incredible for me, for my mom, for my family, to have that recognition [through the AIA Chicago award] in a different country and after knowing all of the effort that it took. To me it’s mind blowing. I’ve been invited to do keynotes and to belong to other organizations. What I feel is that it has opened up the opportunity to tell my story, so younger generations and young architects see that they can aim for it, too.” •



[Left] An aerial view of the 95th Street/Dan Ryan Intermodal Chicago Transit Authority station. Photo: James Steinkamp Photography



The Chicago Transit Authority’s Washington/Wabash “L” train station. Photo: Tim Klein



The Chicago Transit Authority’s Quincy Elevated “L” train station. Photos: Darris Lee Harris Photography



Renderings of a design for a courthouse in the Northern Mariana Islands. Images: EXP

Connection to the Community

Alzira Maldonado Protsishin (M.A.S. ARCH '14) wanted to ease the life of everyday commuters in simple ways at the Chicago Transit Authority (CTA) stop at West 95th Street, where it intersects with the busy Dan Ryan Expressway.

The existing structure was a dark, hulking, concrete building where commuters passed through turnstiles and descended into a cracked and dilapidated interior.

Much of that was torn down. In its place, she helped design a bright, airy terminal space with numerous windows and skylights, aluminum curtain walls,

and a colorful ribbon design on its glass and metal-paneled exterior. A second building was built on the south side of the busy 95th Street, connected by a skyway, effectively doubling the size of the 62,250-square-foot project. Additional terminal space transformed the site into a hub for both city buses and far-reaching Greyhound lines.

“When you change the architecture of the building to have more natural light, make it more secure, and with materials that are more dignified, it changes your day. It’s about making your life easier,” Maldonado Protsishin says.

In the future, Maldonado Protsishin hopes to continue working on “big community impact projects,” in transportation and elsewhere. She worked on the renovation and Americans with Disabilities Act adaptation of the historic CTA “L” train Quincy Elevated Station and the striking design of the new Washington/Wabash “L” station, and is currently working on an even larger project for the CTA: the renovation of a large swath of the Red and Purple “L” train line on Chicago’s North Side, including four stations that are in need of modernization. —*Tad Vezner*

STRAIGHT A'S

By Thaddeus Mast

Adozen anxious students and professors huddled around a speaker in a small room in California, waiting for any sign of life. It was 11:21 p.m. on May 18, 2017, when years of hard work and cooperation with NASA's Jet Propulsion Laboratory were realized.

A string of "beeps" cut the static, and the room erupted in applause: CSUNSat1 had survived a launch to space and was sending its first signal to the ground station at California State University, Northridge. Faculty members James Flynn (EE '77) and Sharlene Katz—a potent husband-and-wife duo that led the project—calmly translated the dots and dashes of the satellite's Morse code transmission. The message read "CSUNSAT1 A A A A A."

PHOTO BY LEE CHO

"We called this 'straight A's,'" Flynn says. "The message started by telling us the satellite was alive and in good health."

Four years earlier, the team received a grant of \$100,000 per year for two years from NASA and \$60,000 from the Jet Propulsion Laboratory to support its part of the project, "Smallsat Low Mass, Extreme Low Temperature Energy Storage," with JPL.

Project leads Flynn and Katz, both electrical and computer engineering faculty members at CSUN, wanted to build a satellite to test a battery developed by JPL that would withstand the bitterly cold temperatures of space, and NASA wanted to help.

"If you take batteries, little cells like those in vape pens, and they get too cold, they die permanently. [Spacecraft] need heaters for these, and they are all expensive, dangerous, and limit the mission," Flynn says.

Flynn, Katz, and a team of 70 students spent four years building a satellite that is the size of a shoebox to send to space to qualify JPL's cold battery. CSUNSat1 was built with traditional and experimental energy cells to prove it could switch over and utilize the new technology. It worked, and the battery responded quickly to power needs—faster than NASA's current cells. NASA plans to use the technology in future missions.

Despite years of planning and careful construction, failures on satellites such as CSUNSat1 were common, Flynn says, and the team was far from certain that the small box would make contact—let

alone succeed in its primary mission of testing the new energy-storage system.

"Nothing is worse than knowing the satellite was coming over the horizon, but it is silent," Flynn says.

Flynn served as a systems engineer on the project, making sure that the satellite came together perfectly. He focused on making sure that the satellite could talk to its ground station, making use of his background in communications.

After graduating from Illinois Institute of Technology, Flynn served as a consultant for the electronics used in the film, radio, and communications industry and ended up in California.

"Around then, I ran into a lovely lady from California State University, Northridge. She said I could tell a good story and encouraged me to start teaching in 2007. Long story short, we got married," Flynn says of Katz.

After three years teaching, JPL reached out to the university. The lab asked faculty and students to build a satellite. It would provide guidance to the faculty and students before gradually leaving the project in the hands of those at CSUN.

"I was teaching young people about communications: FM, AM, TV, and so on," Flynn says. "Now they say I have to learn how to talk with a satellite going 27 times the speed of sound, 200 miles up, and get all the information needed."

CSUNSat1 was part of the CubeSat program, which NASA uses to test future technology by hitching the five-pound test craft to normal resupply



[From left] James Flynn and Sharlene Katz deliver the CSUNSat1 to NASA in 2017.

and ferry rockets, usually those visiting the International Space Station. The university team watched live as astronauts released CSUNSat1 into low Earth orbit.

Flynn and Katz devoted themselves to the satellite while keeping a full teaching load, leading to long nights and early mornings.

JPL was interested in more than the satellite: it planned to use the project, and its 70 dedicated students, as a recruiting pipeline. It worked, and about 20 team members would go on to work at the nation's premier spacecraft laboratory. Others would join SpaceX and similar space-focused companies.

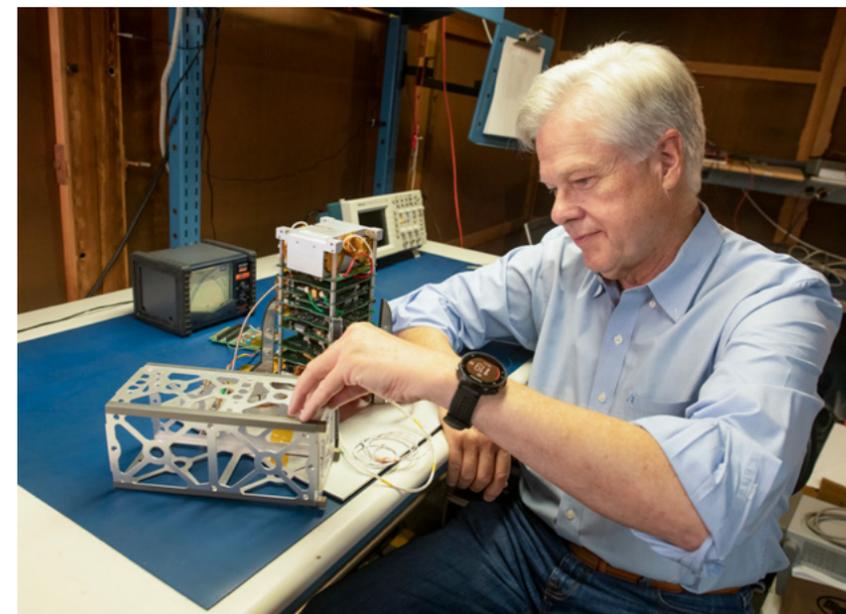
Armen Arslanian, who was a second-year engineering student at CSUN at the time, joined the project and worked for nearly two years focused on the satellite's communication. He went on to work at JPL.

"Both [Flynn and Katz] were educators," Arslanian says. "They taught us industry standards and how things are done in the real world versus sitting in the classroom and learning about theoretical physics."

Not long after the satellite completed its mission, Katz died of cancer late in 2017, and the satellite projects halted. Now, five years later, Flynn and the team at CSUN are ready for another satellite—this time, finding a cheap and simple solution to removing space debris.

"It was a lot of, 'Oh no, here we go again,'" Flynn says. "Losing Dr. Katz took the wind out of our sail in more ways than one, but in her memory, I'll try my darndest to get this mission up there." •

More online: csun.edu/cubesat



James Flynn works in a lab at California State University, Northridge.

PHOTO: LEE CHO

/* Cracking the Code on Health Care */

By Steve Hendershot



PHOTO BY TONY RINALDO

It's natural to wonder whether people who achieve early, breakaway career success are geniuses, or just in the right place at the right time. In the case of Saurabha Bhatnagar (CS '02), who built twin areas of expertise in health care and software before those sectors began to merge, it's a bit of both.

"I just loved two things, and then a multibillion dollar industry was created around my two loves," Bhatnagar says.

Bhatnagar is the chief health officer and general manager of Commure, a high-flying, San Francisco-based health tech startup that raised more than \$500 million in investment capital and is backed by a leading health

care venture firm General Catalyst. That's just his latest gig: already, Bhatnagar also has overseen thousands of employees and billion-dollar budgets at the United States Department of Veterans Affairs, and also worked as chief medical officer and head of digital and technology at UnitedHealth Group, the fifth-largest company in America, according to the latest Fortune 500 rankings. Additionally, he has spent the last nine years on the faculty of Harvard Medical School, where he serves as faculty director of global executive education.

Bhatnagar chose his career path while he was still a high schooler in suburban Detroit, not because he was eyeing the size of the emerging health tech market, or because he aspired to a spot in the C-suite. Instead, he discovered a passion for coding while learning on his family's computer, and also loved volunteering at the urban hospital where

his mom worked as a medical biller. Bhatnagar cleaned bedpans, made beds, and delivered lunches, connecting with what he calls "the human side of health care."

He began searching for ways to combine his interests in coding and medicine as a career, and discovered an Illinois Tech program that would allow him to study computer science as an undergraduate before proceeding directly to Chicago Medical School at Rosalind Franklin University. While on Illinois Tech's campus, Bhatnagar not only honed his coding abilities, but also learned two other skills that have served him well in the years since: human-centered design, and how to collaborate across disciplines. He credits Illinois Tech's Interprofessional

Projects (IPRO) Program, where he worked on a project involving a United Nations war crimes tribunal, for showing him the value of multidisciplinary teams.

"Most interesting work [in health care] happens in a very interdisciplinary fashion, where you're working across designers, clinicians, and care managers, and also across the legal side and the technology side," Bhatnagar says. "That IPRO was so critical for me because it developed my mindset to just naturally be oriented that way."

In the years since, that approach has emerged as one of Bhatnagar's defining strengths.

"He's very flexible and nimble and open to taking on new roles and learning. He'll say, 'I may not know exactly how to do this, but I will work with this other team to figure it out and build the things that we need,'" says Ashwini Zenooz, Commure's CEO.

At Commure, Bhatnagar and Zenooz are working together to create what they call an operating system for health care: a platform that will facilitate interoperability and workflows among different health tech

"Part of why it's so complex to navigate our antiquated health care systems is that there is no operating system-type model for health care." –

Saurabha Bhatnagar

applications and software systems, including some cumbersome legacy tech that has proven challenging to integrate for many health systems. It's a substantial challenge, which is part of what attracted Bhatnagar to the company.

"We're solving a core technology problem around access that I've been trying to work on at every stage of my career—and now here

is a company that was created specifically around that," Bhatnagar says. "Part of why it's so complex to navigate our antiquated health care systems is that there is no operating system-type model for health care. We're working to create one, and that's super exciting, even though it's a very technically challenging problem. There were all the right puzzle pieces to do something, and now we get to do the fun part of creating, building, and executing the solution."

One of the key challenges that Commure must overcome is to meet the different needs of several different categories of users, including patients, clinicians, and hospital and payor administrators. That's where Bhatnagar's background in design comes in handy, because he excels at ensuring that Commure keeps the needs of all those stakeholders in mind while devising its solution.

"He's empathetic to the needs of the clinicians and care team members who are going to be using [Commure's product], but is also able to push back and say, 'We need to think about patients first,'" says Zenooz. "And he's able to do that in a collaborative way that leads to agreement because he isn't political or bureaucratic—he actually just wants to bring people together so they create the best experience for our users."

In addition to his work at Commure, Bhatnagar remains active at Harvard, where he teaches in the executive education program, including a new master's-level course for global health care leaders who are examining the intersection of quality, patient safety, and technology in health care operations. Bhatnagar also still sometimes volunteers as a doctor in Boston-area clinics, continuing the tradition of health care service that began as a teen in suburban Detroit.

"I still love the things that I loved back then, like delivering food trays, spending time with patients and family members, and tinkering with technology," says Bhatnagar. "It's also important to me to carve out enough time to make sure I'm close to where health care is actually happening, which is at the bedside." •



Sounding Out The Problem

By Andrew Wyder

ILLUSTRATION: SCOTT BENBROCK

Halcyon Lawrence (M.S. TCID '10, Ph.D. TCOM '13) was struck by the oddity: As she tried to clear up a banking issue with an institution in her home country, Trinidad and Tobago, while pursuing her studies in Chicago, the digitized voice recording that was directing her to help was not native to her Caribbean island nation.

It was, instead, what could be considered a traditional American voice.

"Why are we listening to foreign accents in a local context?" Lawrence remembers wondering, looking back on an incident that was initially brought to her attention by her mother in Trinidad as Lawrence studied at Illinois Institute of Technology.

Her mother told her that the bank had left a recorded message saying that eight transactions had been made on Lawrence's card, despite her using it rarely, leading Lawrence to believe that she had been hacked. In reality, the call to her mother referenced just one transaction.

"I remember sitting there and actually sketching out phonetically what my mom heard versus what was said and realizing why it was so easy for her to misunderstand *a* transaction with *eight* transactions," says Lawrence, an associate professor of technical communication at Towson University. "It was one of those moments when I thought, 'We can design speech the way that we design posters and how we think about visual layout and visual design.' There was no reason why that device could not have said *one* transaction."

While her experience was relatively minor, Lawrence recognized that there was more at risk with such little attention paid to the design of sound and speech communications: "There are a lot more high stakes. There are speech

technologies being deployed in courts of law. They're being deployed as emotion detectors in schools, in prisons," she says.

Upon earning a bachelor's degree at the University of the West Indies in Trinidad, Lawrence began working as a technical trainer. With a father who worked at IBM, she grew up with a personal computer in her home, so teaching university students and those in industry about how to use software and other technology came naturally.

But eventually, after serving as an adjunct professor of technical writing at her alma mater, she realized that she needed formalized training. That pursuit led her to Illinois Tech, and, eventually, to Matt Bauer. A linguistics professor, Bauer served as Lawrence's adviser—and made clear that he could advise her only in his area of expertise.

It was a fortuitous match. Bauer's courses helped her think more broadly about the linguistic issues that exist in the design of communication. In an Interprofessional Projects (IPRO) Program course that he taught, with McDonald's as the client, things began to click. The company wanted to know why their agents didn't always hear the right order, with Sprite and fries, for example, often being confused for the other.

"It was the first time I started thinking, and he had us thinking about, something other than just the design of communication that was written or visual," Lawrence says, "that there may have been some sort of sociolinguistic or maybe even an environmental reason why these errors were happening."

Lawrence saw that void and dove in.

Her essay, "Siri Disciplines," published in *Your Computer Is on Fire* in 2021, explored the bias that voice technologies such as Siri have toward people who speak with non-western accents.

"A lot of people talk about language diversity in the U.S. just from a U.S. perspective, but Halcyon talks about it through a world-wide perspective," says Laura Gonzales, an assistant professor of digital writing and cultural rhetoric at the University of Florida and a colleague. "It's such a great way to illustrate language and accent bias, and how it plays out in everyday ways. It's really groundbreaking and unique compared to the other research I've seen."

If technical communication is supposed to make technology approachable, Lawrence's research shows how far it has to go to make it equitable. Her work often explores the impact of technology not being developed in a way to account for people who don't have traditional, non-western accents.

She points to the development of an artificial intelligence software that makes non-western accents sound like native western speakers in real time as a prime example of the core issue: reacting to the problem not by examining the design of the communication, but by creating a different technology.

"I remember sitting there and actually sketching out phonetically what my mom heard versus what was said and realizing why it was so easy for her to misunderstand *a* transaction with *eight* transactions." —Halcyon Lawrence

"The tech is happening so fast that we are having to debate the ethics of use in real time," says Sarah Gunning, associate professor of technical communication at Towson and a collaborator. "Her work starts to shine the light on the potential issues we're going to run into down the road."

Lawrence's work has an inherent social justice component—and

while she can see the void in recognizing the deficiencies of the design of sound and speech communication, she also recognizes there is a line to tread.

"I'm asking questions about does more representation address the problem? One of the things that we know about communities of color is that they have traditionally found ways of navigating anti-Black spaces. And language is one of the ways that we do that," Lawrence says. "What does it mean for me to advocate for these languages to be understood without really thinking about how I am opening up communities of color to more harm?"

That approach is but one reason, colleagues say, that Lawrence and her work stands out.

"She blends her lived experience and expertise with the research that she continues to learn from and do. It's a critical combination," Gonzales says. "I don't think anyone else can do the research in the same way. That's why I'm always following her work. Her perspective is so needed in the field, and has been overlooked for a long time." •

PHOTO: KANJI TAKENO/TOWSON UNIVERSITY



Halcyon Lawrence in her office at Towson University.

More online: halcyonlawrence.com/index.htm

HARDWIRED TO SERVE

BY CASEY MOFFITT

LLEWELLYN “DON” MEANS JR. (EE ’89) saw the rewards of a life of service from an early age. He says that the power that he gained from watching his parents give back to their community has carried him throughout his career.

“It’s easy to see the value when you bring people together to do good things,” Means says. “It’s satisfactory in and of itself.”

Means says it wasn’t uncommon for him to see his parents reading books to schoolchildren, volunteering with United Way, or helping at a local clothing drive. Both of Means’s parents also made their careers in service. His father, Llewellyn Means Sr., served in the United States Navy. His mother, Sandra Means, served on the Rochester, Minnesota, City Council for 13 years.

Seeing his parents incorporate service into their careers inspired him to do the same.

“I didn’t have to look any further than my parents for any heroes or mentors or leaders,” he says. “Throughout my parents’ careers in public service, the common thread that continues to inspire me is being connected to something bigger than yourself.”

As senior executive and director of the Defense Information Systems Agency’s (DISA) Operations and Infrastructure Center, Means oversees tens of thousands of miles of fiber optics infrastructure that serves as the main communications service for U.S. military combat operations from the White House to the foxhole.

He began his association with DISA while he was serving in the Navy. He was stationed in the National Military Command Center in the Pentagon, and was assigned to DISA.

“It was an amazing experience, supporting the secretary of defense and the Joint Chiefs of Staff,” he says.

He later worked with DISA as a contractor with Raytheon Technologies. In 2000 he had the opportunity to join DISA, where he has risen through the ranks. Means began his career as an officer in the Navy, which he entered after completing the Naval Reserve Officer Training Corps program at Illinois Institute of Technology.

“I always had an affinity for the Navy,” Means says. “My father served in the Navy, and my uncle served in the Merchant Marines. Illinois Tech ROTC was a great way for me to start my military career.”

During each step of his career, Means says he has seen the effect of his service grow.

“As a youth, I saw the local impact of service,” Means says. “In the Navy, that expanded. I was working with a band of fellow warfighters, providing a service to the nation. Now, with DISA, I am not only supporting the nation, but also our allies on a global scale.”

“It’s easy to see the value when you bring people together to do good things. It’s satisfactory in and of itself.” —Don Means Jr.

“It’s all been an expansion of service,” he continued. “It’s a continuation to have an impact—pulling people together to see the greater impact.”

Means also is working to recruit new cybersecurity talent, including with Illinois Tech to provide educational opportunities for current students who could help DISA accomplish its mission.

Calvin Nobles, chair of Illinois Tech’s Department of Information Technology and Management, says Means has been instrumental in developing an educational partnership agreement between the university and DISA. The partnership will provide internship opportunities for Illinois Tech students, as well as employment paths with DISA and other federal agencies.

“Internship programs are key to preparing the next generation of the tech and cyber workforce,” Means says. “If we want to get them ready to hit the ground running, there is no better way than through internships and partnerships.”

Nobles says the partnership not only provides DISA with tech talent, but also

grants the organization access to the expertise and research capabilities at Illinois Tech.

“This partnership allows us the opportunity to see where we fit in with other federal institutions,” Nobles says. “This could help us develop better partnerships with other federal agencies.”

Means’s work with Illinois Tech is an extension of the work he does on a daily basis to pull people together to make sure that DISA’s combat communications network operates continuously, is properly maintained, and is secure. Means says that the network fends off hundreds of millions of cyberattacks a day, and just one successful attack can affect the ability of soldiers on the battlefield to carry out their missions.

The attackers themselves come from a variety of backgrounds. Some attackers are state-sponsored. Some are from the criminal element or terrorist organizations. Others are hackers looking to make a name for themselves.

“They are not idle,” Means says of the attackers. “They have refined their attacks, and will push to find a vulnerability. They aggressively attack, gather data, and threaten our way of life.”

Means says the biggest challenge to keeping the network secure is having an understanding of the different methods that the variety of attackers use, as attackers are always looking for new ways to gain access to their targets. In his center, Means stresses the importance of being proactive and preventative to stay ahead of the adversaries.

“First, you’ve got to take care of the known knows,” Means says. “From there you start to work to find the unknowns, or nuanced attacks.”

Overseeing the DISA communications network means that every level of combat command has to be disciplined in cybersecurity. The network must be designed with cybersecurity in mind. Means says that the cybersecurity team extends to the designers and coders who build it.

Each person who relies on the network has a cybersecurity role to play to ensure it is safeguarded. It’s another way Means works to bring people together to make a greater impact.

“The closer to battlefield, the more keenly aware they are of cyber discipline,” Means says. “Their lives are at stake. Their partners’ lives are at stake.” •



PHOTO BY MICHAEL REITER

Class Notes

1960s

STEPHEN McCLUSKEY (PHYS '61) was appointed as a fellow of the American Astronomical Society for his historical research in early astronomies and for his service to the society's Working Group on the Preservation of Astronomical Heritage.

JOHN OLIN (ME '61), Carmel Valley, Calif., was inducted into the inaugural Illinois Tech Athletics Hall of Fame on Friday, September 16, 2022, during the university's Homecoming 2022 celebration.

N.J. "PETE" POINTNER (ARCH '61, M.S. CRP '62), Wheaton, Ill., served as an expert witness in his 74th case of land use litigation and to review development plans for Glen Ellyn, Illinois.

FRANCIS KULACKI (ME '63, M.S. GE '66), Wayzata, Minn., received the Professional Achievement Award at the 2022 Alumni Awards Celebration.

DAVID ROGERS (M.S. EE '64), Fargo, N.D., retired from North Dakota State University after 40 years of service and was given the title of emeritus professor.

BOB FREY (CHEM '65), Seattle, received the Collens Merit Award at the 2022 Alumni Awards Celebration.

WARREN LETZSCH (CHE '67), Ellicott City, Md., was named a fellow of the American Institute of Chemical Engineers.

JEFFREY DENENBERG (M.S. EE '68, Ph.D. '71), Trumbull, Conn., received the Alumni Medal at the 2022 Alumni Awards Celebration.

TOM KORZENECKI (FPE '69, CHE '70), Pasadena, Calif., was elected to the Board of Trustees of Carnegie Institution for Science in Washington, D.C.

1970s

CHARLOTTE DENENBERG (M.S. MATH '70, Ph.D. '73), Trumbull, Conn., received the Alumni Medal at the 2022 Alumni Awards Celebration.

BOB HOEL (BE '70), Elmhurst, Ill., received the Alumni Service Award at the 2022 Alumni Awards Celebration.

PETER HANIK (CHE '72), Houston, published a book titled *Type 3 Solutions: Problem Solving for Competitive Advantage*. The book describes a process for innovative problem solving and a number of common business/technology applications.

ELAINE COTSIRILOS THOMOPOULOS (Ph.D. PSYC '74), Burr Ridge, Calif., served as the editor of *Modern Greece*, a thematic encyclopedia recently published by ABC-CLIO.

MARC R. HANNAH (EE '77), Los Altos, Calif., joined Voltron Data, which was launched last year by former employees from NVidia, Urso Computing, BlazingSQL, and the co-founder of Apache Arrow.

STEVEN GLICKMAN (ARCH '78), Chicago, was elected chairperson of the Lehigh Valley Planning Commission, and celebrated the 22nd year of his firm, Steven Glickman Architect.

JIM BERKE (EE '79), Georgetown, Texas, retired from GE Aviation in Grand Rapids, Mich. He has since moved to Georgetown, Texas, where he could do consulting work part time, though he is immensely enjoying being "retired-retired."

JOEY PERRY (CS '79), Tomball, Texas, published his second book, which is titled *Pressing on Toward Maturity: Seven Biblical Truths for Spiritual Growth*.

1980s

DAN HAJDUK (MGMT '80), Cartersville, Ga., served in the United States Navy from 1981–2001, and now works for Delta Air Lines, where he has been since 2001.

MATHAI VARGHESE (MATH '81), North Terrace, Adelaide, Australia, received the Professional Achievement Award at the 2022 Alumni Awards Ceremony.

SCOTT PADIAC (DSGN '83), Glencoe, Ill., is the proud papa of nine grandchildren.

JAMES MURAIIDA (ME '84), Mokena, Ill., was appointed as a vice president at Sargent & Lundy, an engineering firm in Chicago.

CHRISTOPHER NEMETH (M.S. DSGN '84), Evanston, Ill., was named a fellow of Applied Research Associates Inc., a 1,500-member national science and engineering consulting firm.

JIANG HSIEH (Ph.D. ECE '89), Brookfield, Wis., received the Professional Achievement Award at the 2022 Alumni Awards Celebration.

MARY KISINGER (MBA '89), Fitzwilliam, N.H., is nearing retirement, and is enjoying gardening; rehabbing a house built in 1810; playing with her dog, Tuli; and working part-time as deputy tax collector for a small, quintessential New England town.

1990s

DAVID WIATROWSKI (M.S. EE '93, M.S. CE '08), Woodstock, Ill., was awarded the 2021 Business Patent of the Year by Motorola Solutions Inc. on March 11, 2022, for United States Patent Number 8,605,650: "System and Method for Interrupting a Transmitting Device in a Communication System."

JONATHAN ATWOOD (CHE '96), West Linn, Ore., joined Trillium Engineering as chief executive officer. Trillium Engineering is a leading designer and manufacturer of highly engineered camera gimbals for unmanned aerial systems that perform mission-critical intelligence and surveillance.

CONNIE CHEN-SIMONE (DSGN '96), Stow, Mass., and her husband, Christopher, welcomed the arrival of a baby girl, Cataleya, on April 15, 2021. She has one big brother, four-year-old Cordell.

ALLAN SANEDRIN (EE '96), Hoffman Estates, Ill., started a new position as the principal engineer for Fire and Life Safety Signaling Systems.

STEVEN TETENS (ARCH '96), San Diego, joined Gemdale USA Corporation as managing director of project and construction management on November 15, 2021.

TORRENCE L. HINTON (ME '98), Chicago, was named president of Peoples Gas and North Shore Gas.

2000s

SAID AL-HALLAJ (Ph.D. CHE '00), Chicago, received the Professional Achievement Award at the 2022 Alumni Awards Celebration.

RENEE B. CZERYBA (M.S. PHRD '00), Arlington Heights, Ill., was mentioned in the *Wall Street Journal* as a top performer at Cushman & Wakefield.

NICHOLLE HEMPEL (LAW '00), Los Angeles, was appointed as an immigration judge to the Houston Greenspoint Park Immigration Court.

JEREMY R. THOMPSON (LAW '01), Round Rock, Texas, joined Latitude as its director of legal recruiting and placement in the Austin, Texas, area.

CORINNE TRTAN (CE '02), Naples, Fla., was inducted into the inaugural Illinois Tech Athletics Hall of Fame on Friday, September 16, 2022, during the Homecoming 2022 celebration.

GLENN KRELL (MPA '03), Newark, N.J., is a research integrity officer at Rutgers University. He launched the responsible conduct of research collaborative in the Big Ten Academic Alliance, the nation's premier higher-education consortium of top-tier research institutions.

BHUVANA SRINIVASAN (ME '04, AE '04), was named a Crofton Faculty Fellow in Engineering by the Virginia Polytechnic Institute and State University Board of Visitors.

JOYCE TAN VELA (ARCH '04) was elected to the Habitat for Humanity Chicago Board of Directors.

JACQUELINE SOKOLOWSKI (PSYC '05, MBA '14), Riverside, Ill., received the John J. Schommer Honor I Award at the 2022 Alumni Awards Celebration.

SpotLight

Education Engineers Success

If there was ever a person who could singularly embody the idea that learning is a lifelong endeavor, it is **Ralph L. Barnett** (CE '55, M.S. MAE '58, Ph.D. CE '21).

The journey that began in the 1950s while he was an undergraduate student at Illinois Institute of Technology continues today, as Barnett, at 89 years old, remains an active leader in the safety design industry—and he recently added a new title to his lengthy list of accomplishments: recipient of a doctorate in civil engineering.

"It means a lot to me," Barnett says, "but it really means something to every university that has an old timer get a Ph.D. and makes a big deal out of it, because if you're interested in selling the notion that education never stops, that's what you want to do."

An instructor at Armour College of Engineering for more than 40 years, Barnett counts time spent working as a professional engineer, research engineer, and director of research and development for organizations such as Armour Research Foundation and IIT Research Institute, among others, as career highlights.

But the work that has meant the most to him—and what he still does today—is his work in the safety industry. Guided by a mission to make the world safer for consumers, Barnett has obtained 36 safety patents for products such as pool drains, household appliances, and airplane seats, among many others.

He has founded multiple companies in the safety realm, including Triodyne, Inc., a consulting science firm that he still leads and

was founded in 1969; it focuses on the safety of mechanical devices and systems. Through Triodyne, he has provided legal support services to more than 32,000 product liability cases.

Education is also part of Barnett's business ethic, and it's why he paid for each of his employees at Triodyne to get a graduate degree. "I don't care what you study or where you enroll, everything is relevant when it comes to mechanical engineering," he says that he emphasized to his employees.

Fittingly, Barnett actively lives up to that ideal.

He started work on his doctorate in the 1950s and had much of it accomplished before starting his career. But to earn his doctorate, he would need to write a thesis. With a lifetime of experience to draw from, and the cooperation of Illinois Tech leaders such as Interim Provost Kenneth T. Christensen, Barnett spent two months working on a thesis that he finished late last year.

On August 4, 2022, with Christensen and Illinois Tech President Raj Echambadi on hand, the university celebrated yet another of Barnett's impressive achievements.

"We had the president and the staff that were so important in this process," Barnett says of the celebration. "You have 60 days to do a thesis, and I'm giving them a chapter every week. Every one of these men has to stop everything they're doing and read this chapter....We did this for eight weeks [and] everybody rolled up their sleeves, and they just did a phenomenal job." —Andrew Wyder



Ralph Barnett [bottom row, third from left]

“I don't care what you study or where you enroll, everything is relevant when it comes to mechanical engineering.”

—Ralph L. Barnett

Memories Made of a Meal

It was the moment that Thanksgiving became more than a meal with family. More than a decade ago, **Sam Gunda** (EE '80) welcomed a small group of international students from Illinois Institute of Technology to his home in Addison, Illinois—a village just west of Chicago—to celebrate the holiday.

Gunda began the proceedings with a speech about Thanksgiving that still resonates with his daughter, **Indira Saladi** (M.S. EE '93).

"It was the most impactful and powerful, because he would say that Thanksgiving is our holiday. It is the immigrants' holiday," Saladi remembers. "It is a celebration of new people to the United States. It really changed the way we all thought of Thanksgiving."

That first gathering at the home of Gunda and his wife, Seetha, was the impetus for the creation of the Satyanarayana (Sam) Gunda International Student Thanksgiving Celebration Fund, which Saladi and her mother started in honor of Gunda, who passed away in October 2020. The fund organized its first Thanksgiving meal for more than 80 international students in The McCormick Tribune Campus Center on Illinois Tech's Mies Campus last November.

It is a fitting tribute to Gunda, whose own experience at Illinois Tech included a Thanksgiving meal that left an impression on his family.

Gunda arrived from India to study engineering at Illinois Tech in 1971, with Seetha and Saladi arriving in 1972. The following year, the Gunda family was invited to spend Thanksgiving at a dinner arranged specifically for international students and their families by Illinois Tech.

"When we came to the U.S., we didn't know much about it," Seetha says, referring to Thanksgiving. "That was very unique to have a host family, and it was a wonderful memory."

That experience eventually led to the Gundas hosting Illinois Tech international students at their home for a traditional, Ameri-



PHOTOS: COURTESY OF INDIRA SALADI

“My father made a difference and each Illinois Tech student can as well. When my father immigrated as a student to Illinois Tech, he had no idea what the future would hold.”

—Indira Saladi

can Thanksgiving dinner for the students' first Thanksgiving—just like they had. Over the years it transitioned to an international-style meal, but the atmosphere, focused on making everyone feel welcomed, never changed.

An engineer by trade, Gunda was an entrepreneur and business owner, a volunteer for a multitude of organizations and schools in Addison, and, later in life, a fitness champion who, after he started running at age 60 and biking soon after, competed in marathons in Chicago, London, New York, and Antarctica, as well as in many bicycle racing events. He also uplifted the village he was born in by funding education and health care services.

It is that zest for life and tremendous impact that Saladi hopes the students take away from the Thanksgiving event.

"My father made a difference and each Illinois Tech student can as well. When my father immigrated as a student to Illinois Tech, he had no idea what the future would hold," says Saladi, who is the president of Orchard, a health care staffing company. "Just like he made a difference, these students will as well. They can make a difference, and they should be ready to be surprised at the impact that their life will have." —Andrew Wyder

ALUMNI NEWS

LAUREN JOYCE HENSEL (PTC '06, MPA '17), Netherlands, was inducted into the inaugural Illinois Tech Athletics Hall of Fame on Friday, September 16, 2022, during the Homecoming 2022 celebration.

CHRIS SCHELLING (M.S. FM '06) is excited to announce that his first investment book, *Better than Alpha: Three Steps to Capturing Excess Returns in a Changing World*, was published by McGraw-Hill in March.

RAHUL SINHA (Ph.D. EE '07), Bangalore, India, was nominated for the role of chief technology officer for a commercial digital platform offered by Tata Consultancy Services.

MARGARET BATTERSBY BLACK (LAW '08), Elmhurst, Ill., was named managing partner of Levin & Perconti, a law firm specializing in nursing home, medical malpractice, and catastrophic injury and death cases. She was also named one of *Crain's Chicago Business's* 2021 Notable Gen X Leaders in Accounting, Consulting, and Law.

RUTH B. LOPEZ-MCCARTHY (LAW '09), Oak Park, Ill., received the International Award of Merit at the 2022 Alumni Awards Celebration.

2010s

CHRISTOPHER LEE (CE '10), Boston, started to pursue an M.B.A., with a focus on social impact, at Boston University's Questrom School of Business in August 2021.

DAWVEED SCULLY (ARCH '10), Chicago, received the Outstanding Young Alumnus Award at the 2022 Alumni Awards Celebration.

ROBERT IRONS (Ph.D. FIN '12) has published two books within the past two years: *The Fundamental Principles of Finance* (Routledge, 2020), an undergraduate textbook, and *The Preamble as Policy: A Guidebook to Governance and Civic Duty* (Peter Lang, 2021), a critical analysis of the preamble of the Constitution.

GARETH MEIRION-GRIFFITH (Ph.D. MAE '12), Chicago, received the Outstanding Young Alumnus Award at the 2022 Alumni Awards Celebration.

LIAM BARRETT (BA '13), Chicago, was inducted into the inaugural Illinois Tech Athletics Hall of Fame on Friday, September 16, 2022, during the Homecoming 2022 celebration.

REI KARASAWA (ARCH '14), Lynnwood, Wash., and Erik Schultz (ARCH '13) tied the knot on April 23, 2022, in Seattle after delaying the wedding for a year due to the pandemic.

AMEENA PAYNE (BA '15), Australia, received the Outstanding Young Alumna Award at the 2022 Alumni Awards Celebration.

JULIE CHANDLER (ARCE '16), Aurora, Ill., joined Resource Innovations' team that engages with the SRP Business Solutions program in Phoenix.

2020s

MICHAEL RIVICH (M.S. MANL '20), Chicago, became part owner of Rivich Auction & Estates, an online auction house specializing in art and design that is located in Chicago's Fulton Market neighborhood.

JACLYN CARMICHAEL (MPA '21), Chicago, recently started a job with the world-renowned

Museum of Science and Industry in Chicago as the director of youth programs and pathways.

MEREDITH LUDLAM (ARCH '21), Chicago, joined CPL as an architectural designer. She is responsible for all aspects of design, including drafting schematic drawings and preparing client presentations for a variety of projects.

ALISON McDONALD (M.S. ITM '21), University Park, Ill., joined HUB International.

HITANSHU RAMI (CS '21), Schaumburg, Ill., joined General Motors after graduation.

MICHAEL WOJCICKA (CS '21), Chicago, accepted an offer to join Google as a software engineer shortly after graduation.

Share Your News

We want to hear from you. Send us your class note by visiting alumni.iit.edu/class-notes.

Submissions may be edited for style and brevity.

ILLINOIS TECH

We Are Illinois Tech

Illinois Tech's commitment to student success has never wavered. In fact, it is the #1 reason that we are laser-focused on identifying and distributing more scholarship dollars to deserving students—we provided more than \$90 million in scholarships to undergraduates last year alone.

To support Illinois Tech students in their pursuit of success, please visit www.iit.edu/giving.

POWER THE DIFFERENCE
OUR CAMPAIGN FOR ILLINOIS TECH



An Update from the Alumni Board Chair **Bob Hoel**

As an Illinois Institute of Technology alumnus and trustee, it is my greatest honor to serve as the next chair of the Illinois Tech Alumni Association Board of Directors. I must first acknowledge the remarkable leadership of former board chair Sherrie Littlejohn (M.S. CS '82), whose inspiring service to our institution began long before she took on this role nearly four years ago. I am eager to build upon the foundation that she—and the many other great leaders before her—established at the university.

For more than a century, Illinois Tech has stood at the crossroads of exploration and invention, advancing the future of Chicago and the world. Through experiences that blend technology and human-centered education, the university remains committed to providing an environment in which all members of our community are able to realize their full potential.

From the moment that students step foot on campus, they become part of a vibrant community—joining the talented thinkers, doers, and innovators that preceded them. And as members of the Illinois Tech Alumni Association, it is our responsibility to serve the students, both today and for generations to come, with zeal and integrity.

I like to think of the students at Illinois Tech as “alumni in training.” Although our alumni have their own individual talents and singular accomplishments, they do all have one thing in common: they were students at Illinois Tech, students who were eager to create exponential impact in our community, in Chicago, and in the world around us.

Now that we, as alumni, are on the other side of the classroom—whether launching a professional career, working toward an important milestone, or settling down in retirement—there is a unique opportunity that lies ahead. *How can alumni continue to contribute to powering the change that we wish to see in the world? More specifically, how can we ignite the change that we know from first-hand experience starts with Illinois Tech students?*

Students are the heartbeat of Illinois Tech; their passions and endeavors are at the epicenter of everything we do. If we did not have students, we would not have the university that we all know and love.

In this new role, it is my goal to continue to provide students with the opportunities and resources that will encourage them to contribute to the great work being done on our campus, even long after they walk across the stage. Illinois Tech alumni have an opportunity to help build a distinctive experience that students can receive only at this institution and to inspire the next generation of Scarlet Hawks.

Earlier this fall, a historic \$1 billion fundraising campaign was announced to further the university’s founding mission: to harness the power of collective difference to advance technology and innovation for all. With that, I invite you to join me in supporting our future alumni in any way that you can through Power the Difference: Our Campaign for Illinois Tech. Learn their unique stories, donate your time and resources, and continue to elevate the Illinois Tech community as a whole. If you would like to personally join us in recruiting new Scarlet Hawks, mentoring a current student, or participating in a panel discussion, please visit www.iit.edu/differencemaker to get started.

Today, we are in a world that continues to call for new and compelling ways of thinking, and our alma mater was born to answer that call. I look forward to working together to power the difference that is Illinois Tech.

Sincerely,

Bob Hoel (BE '70)

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



Illinois Tech President Raj Echambadi (left) and Illinois Tech Board of Trustees Chair Michael P. Galvin (LAW '78) deliver the “Billion Dollar Sermon” on September 15, 2022.

A ‘Billion Dollar’ Purpose Illinois Tech Announces \$1 Billion Power the Difference Campaign

We are in a world that continues to call for new and different ways of thinking. Illinois Institute of Technology was born to answer that call by building off of our founding purpose—one worth \$1 billion.

This fall the university announced a \$1 billion fundraising goal for Power the Difference: Our Campaign for Illinois Tech. On September 15, 2022, with Vice President for Advancement Ernie Iseminger as emcee, Illinois Tech President Raj Echambadi and Board of Trustees Chair Michael P. Galvin (LAW '78) delivered what has now been dubbed the “Billion Dollar Sermon.”

This historic announcement demonstrates Illinois Tech’s unwavering commitment to its mission—to uplift people of all backgrounds with an education that will help meet the needs of the age and to empower the next generation of leaders to seek solutions to better themselves, the Chicago area, and the world.

The Past

In 1890, when advanced education was often reserved for society’s elite, Chicago minister Frank Wakeley Gunsaulus delivered his “Million Dollar Sermon,” casting a vision for a new kind of university where all students could prepare for meaningful roles in a changing industrial society.

The challenge was met with Philip Danforth Armour Sr.’s donation, and Illinois Tech began its journey to ignite the power of collective difference to build the future that they wanted to see.

And since then, we have given rise to skyscrapers, made vehicles meant for Mars, and found new ways to power the planet in our quest to take humankind to new heights and explore new frontiers.

The Present

Today, Illinois Tech is writing the next chapter of its firm foothold as a global leader in inclusive innovation. The Power the Difference campaign strengthens the university’s role as an engine of opportunity, providing access to academic excellence and practical learning for students from all backgrounds and bringing those perspectives together to drive innovation for all.

“The technological transformation of higher education creates an exciting potential for Illinois Tech’s future growth. We now have an opportunity, rooted in our founding mission, to create a new type of university for the twenty-first century,” says Echambadi.

Focused on making Illinois Tech’s long-term strategic plan a reality, the Power the Difference campaign will help the university grow its student body; invest in faculty, facilities, and

educational programs; develop and deliver new, world-leading research programs; and serve as the premier technology-focused university in Chicago.

The Future

The Power the Difference campaign—the largest fundraising effort in university history—will catapult Illinois Tech into a new era, allowing us to reimagine education and empower future innovation. The difference that we choose to make today will mean exponential improvement in the lives of others tomorrow.

“Illinois Tech is leading the way in empowering students with the skills needed to drive scientific and technological advancement on a global scale,” says Iseminger. “Power the Difference is designed to shape the next century of leaders and create the next era of innovation for the world. It will take everyone to successfully reach our campaign goal, but I am confident that our alumni and university community will continue to rally in support of this inspiring cause.”

Our future is calling us, just as it did more than 130 years ago with the “Million Dollar Sermon.” And this is our time to respond to that calling. This is our time to power the difference.
—*Brianne Meyer*



Gunsaulus | SOCIETY

The Gunsaulus Society is named after Frank Gunsaulus, the first president of Armour Institute of Technology and orator of the famed “Million Dollar Sermon,” which led to Armour’s founding and, eventually, the establishment of Illinois Institute of Technology. The guiding principles set forth by Frank Gunsaulus continue to resonate: belief in the advancement of knowledge, the cultivation of invention, and the importance of preparing students for a life of achievement, service, and fulfillment.

An estate gift to Illinois Tech demonstrates your commitment to the values that were instilled at our founding, which is why we recognize your gift with induction into the Gunsaulus Society, a highly respected group of individuals who, like Frank Gunsaulus, put their beliefs into action for a better future.



Joining the Gunsaulus Society is easy

Let us know of your intentions to leave Illinois Institute of Technology in your will or if you have named the university as a beneficiary of an asset including your IRA. Did you know that the IRS regards any remaining balance left in your IRA to be untaxed income? There are significant tax advantages to making charitable gifts with your IRA.

If you intend to name Illinois Institute of Technology as a beneficiary of your IRA, notify us, and we will share wire transfer or mail instructions for your plan administrator.

The SECURE Act changes the required age that you begin to take your required minimum distribution to 72. If you leave your IRA to most non-spousal heirs, they are required to receive the funds over 10 years and to pay income tax.

If you are age 70½ or older, you may transfer up to \$100,000 annually from your IRAs directly to Illinois Institute of Technology without being subject to income taxes on the distribution. When you reach age 72, it will count toward your required minimum distributions.

For this and other planned giving questions, please contact us at **312.567.5065** or giftplanning@iit.edu.

Obituaries

John W. Rowe

A University Regent and former chair of the Board of Trustees, John W. Rowe passed away on September 24, 2022. Rowe, who served as chair from 2006–13 and was a member of the board for 18 years, was a longtime business leader, including serving for 14 years as the chief executive officer and chairman of Exelon, a Chicago-based corporation that he helped build into one of the largest utility holding companies in the United States. At Illinois Tech Rowe was a leader and transformational philanthropist. For his dedication to the university, he received the university’s prestigious Henry Townley Heald Award for his contributions to humanity and the Alumni Association’s Galvin Award, which honors non alumni for their leadership and dedication to Illinois Tech. In 2020 the State Street Village residence hall was renamed Jeanne and John Rowe Village in honor of the Rowe family’s extraordinary generosity.

William “Bill” VanSanten Jr. (CHE ’61)

A highly accomplished patent attorney, William (Bill) VanSanten Jr. (CHE ’61) passed away on June 19, 2022. VanSanten Jr. served as a partner at the law firm known as Wood, Phillips, VanSanten, Clark & Mortimer, and also was a patent examiner for the United States Patent and Trademark Office. VanSanten Jr. was a dedicated member of the Illinois Tech Board of Trustees for 30 years, and also served as a member of and as chair of the Illinois Tech Alumni Association.

William V. Johnson (LAW ’66)

An acclaimed trial attorney, William V. Johnson (LAW ’66) passed away on January 28, 2022. Johnson joined Johnson & Bell in 1975 and became the firm’s president in 1979, helping it grow to more than 90 attorneys and gain a national reputation. A veteran litigator, Johnson tried civil injury cases and defended many commercial liability, professional liability, and trade secret cases around the United States. Johnson was a fellow of the International Academy of Trial Lawyers, the International Society of Barristers, and the American College of Trial Lawyers, and was a past president of the Chicago Society of Trial Lawyers.

James M. Lommel (MET ’53, M.S. MET ’54)

An engineer who received nine patents during a long career at General Electric, James M. Lommel (MET ’53, M.S. MET ’54) passed away on June 25, 2022. Lommel worked at GE for 58 years, beginning in 1957, when he worked as a metallurgist at GE Research Laboratory in Niskayuna, New York. He also worked for GE’s Information Sciences Lab, served as manager of Whitney Information Services, and was a past president of the Institute of Electrical and Electronics Engineers Magnetics Society and past chairman of the Magnetism and Magnetic Materials Conference and the Intermag conference.

Jotham G. Friedland (Ph.D. PSYC ’72)

The former director of the Institute of Psychological Services at Illinois Tech, Jotham G. Friedland (Ph.D. PSYC ’72) passed away on April 22, 2022.

A psychologist, Friedland specialized in career counseling and co-authored a test that measures aptitude and motivation. Friedland also served on Illinois Tech’s Alumni Association Board of Directors and on the former Lewis College of Human Sciences Board of Overseers.

Donald F. “Don” Hausknecht (PHYS ’62)

A former educator at the University of California, Los Angeles, Donald F. “Don” Hausknecht (PHYS ’62) passed away on February 2, 2022. Hausknecht retired as the manager of information sciences and engineering class programs at UCLA Extension. An active alum, Hausknecht served as a member of Illinois Tech’s Class Reunion Committee and as a regional alumni volunteer.

Walter H. Parduhn (BE ’65)

Walter H. Parduhn (BE ’65) passed away on February 18, 2022. A Chicago native, Parduhn co-founded Armil CFS, a company based in South Holland, Illinois, that designs and manufactures high-temperature process equipment, including furnaces, kilns, and incineration equipment.

James D. Thompson (EE ’64)

An engineer in the aerospace industry, James D. Thompson (EE ’64) passed on November 20, 2022. Thompson spent his entire career with Hughes Aircraft Company—which was acquired by General Motors and became part of the reformed subsidiary, Hughes Electronics Corporation—rising to the vice president level before the GM purchase. His work focused on satellites.

In Memoriam

Alumni

Jerome Braun (ME ’41)
 Ulysses P. Backas (EE ’44)
 Patrick J. Colombo (CHE ’44)
 Thomas F. Heneghan (ME ’44)
 Julius Simon (EE ’44)
 Robert J. Cwiak (ARCH ’47)
 Richard J. Lewis (FPSE ’47)
 Anthony L. Dini (CE ’48)
 Joseph B. Goldenberg (ME ’48)
 Eugene A. Nitz (ME ’48)
 Charles John Ticho (EE ’48)
 Olga M. Springer (LAW ’49)
 Nicholas A. Bilandic (CE ’50)
 Edward M. Ginter (ME ’50)
 Ray C. Lever (ME ’50)
 Sol Hasson (ME ’51)
 Irving Suson (EE ’51)
 Bennett V. Whiteson (ME ’51)
 Edward P. Brand (FPSE ’52)
 Mark Karlen (DSGN ’52)
 Frederick A. Sanders (ME ’52)
 Marvin Sussman (EE ’52, MATH ’59)
 Earl F. Zwicker (PHYS ’52, Ph.D. ’59)
 G. Harry Ashbridge (EE ’53)
 Robert E. Beck (ARCH ’53)
 Philmore J. Hart (M.S. ARCH ’53)
 James M. Lommel (MET ’53, M.S. ’54)
 Robert J. Peterson (ARCH ’53)
 John L. DeRoo (FPSE ’54)
 Paul M. Eubanks (MATH ’54)
 Peter A. Pomnitz (DSGN ’54)
 William E. Voigt (ME ’54)
 Laurence I. Beede (FPSE ’55)
 LeRoy Capper (ME ’55)
 John T. Madell (CHE ’55, M.S. ’57)
 Donald W. Novotny (EE ’56, M.S. ’57)
 Hubert J. Tremblay (EE ’57)
 Joseph A. Spilotro (IE ’58, MBA ’65)

Bosko P. Stamenic (EE ’58)
 Stephen Adrian Tomsic (CHEM ’58)
 Edward G. Edgren (ME ’59)
 Richard Raymond Schnell (PSYC ’59)
 William Charles Cowperthwait (ARCH ’60)
 Thomas F. Harrington (EE ’61)
 F. Robert Tafel (ENGL ’61)
 William A. VanSanten Jr. (CHE ’61)
 Gerald L. Bean (FPSE ’62)
 Donald F. Hausknecht (PHYS ’62)
 Axel O. Sjogren (ME ’62)
 Willard R. Sorenson (M.S. CE ’62)
 David S. Kaplan (EE ’63)
 William L. Drezdzn (M.S. MATH ’64)
 James D. Thompson (EE ’64)
 Robert E. Hlavacek (CE ’65)
 Robert Henry Hoekstra Jr. (CRP ’65)
 Walter H. Parduhn (BE ’65)
 Winfried K. Rudloff (Ph.D. EE ’65)
 Donita J. Spencer Enright (M.A.S. ARCH ’66)
 William V. Johnson (LAW ’66)
 Allen Duncan Rose (PS ’66)
 Paul C. Samson (CHEM ’67)
 Clarence E. Chleboun (MAE ’68)
 Willard R. Haas (M.S. CHE ’68, Ph.D. ’81)
 Raymond R. Seidlitz (MAE ’68)
 Richard D. Glickman (LAW ’69)
 Richard P. Schlueter (EE ’69, CE ’83)
 Sandra E. Lowe (M.S. REHC ’70)
 William F. Bunker (PSYC ’71)
 Robert L. Centner II (IE ’71, MBA ’86)
 Robert S. Greenboam (DSGN ’71)
 Rose D. Martin (M.S. MED ’71)
 George J. Baney (IE ’72)
 James E. Clark (PHYS ’72, M.S. ’79)
 Jotham G. Friedland (Ph.D. PSYC ’72)
 Rolf J. Goehler (EE ’72, M.S. ’75)
 Richard A. Newbould (ECON ’72)
 Randolph W. Tucker (FPSE ’72)

George J. Butvilas Jr. (M.A.S. BE ’73)
 Albert C. Claus (M.S. MATH ’73)
 Robert Edward David (M.S. DSGN ’73)
 David J. Allen (MAE ’74)
 Steven B. Bashaw (LAW ’76)
 Charles T. Kincaid (M.A.S. CRP ’76)
 Randall R. Barth (MGT ’77)
 Judith A. Griffin (LAW ’77)
 Sreedhara B. Murthy (M.A.S. ME ’77)
 Michael C. Washeleski (M.S. ENVE ’77)
 Lincoln V. Janus (LAW ’78)
 Timothy W. Shytile (FPSE ’78)
 Larry J. Hagen (LAW ’80)
 Henriette L. Klawans (M.S. CS ’80)
 Jeffrey T. Wagner (MGT ’80, MBA ’82)
 Thomas E. Ahlswede (M.S. CS ’81, Ph.D. ’88)
 Frank L. Van Overmeiren (FPSE ’81)
 Richard J. Braun (Ph.D. BIOL ’83)
 Juergen Wiedel (EE ’84)
 Tho X. Bui (MET ’86, M.S. ’86)
 Patrick J. Manning (LAW ’87)
 Mark T. Karner (LAW ’88)
 John R. Lemon (CE ’94, M.P.W. ’05)
 Frank Doughty Rawlinson (M.A.S. ARCH ’97)
 Yasmeen Elham Aidinejad (LAW ’98)
 Peter M. Bojan (M.A.S. ECE ’06)

Friends

Karen L. Carson
 J. Grady Cox
 Gwen R. Knapp
 Archibald McClure
 Hyla S. Napadensky
 James R. Reilly
 John W. Rowe
 Bruno Shark
 Arthur Shelamer

Take Five



PHOTO: COURTESY OF THE INSTITUTE OF DESIGN (ID)

Five Questions with Weslyne Ashton

Weslyne Ashton is an associate professor with appointments at Illinois Tech's Stuart School of Business and Institute of Design (ID). Her research focuses on transitioning our coupled social and ecological systems toward sustainability and equity.

Q: The United States is, by most metrics, often behind its peers in sustainability. Why is this?

A: There are biophysical and social factors at play. In the old world (Europe, Asia, and Africa) populations lived at high densities for long periods of time, learning to manage their resource constraints. In the new world (the Americas and Australia) population density was very low—before European colonization—and there were enough resources for people to live lightly on the land. The nineteenth century changed that and has pervaded our worldview about resources to this day: there's enough land for us to take whatever we want and enough space for us to dump whatever waste that we have.

Q: What is the circular economy?

A: We're never going to have a perfectly circular economy, where everything is reused and recycled, but the idea is how can we best manage the resources in a sensible way within the planet's limits. Circularity offers strategies to transform industrial operations by redesigning products, reducing reliance on virgin raw materials, while creating new businesses for sharing services and extending the life of products, as well as recycling.

Q: How does the concept of multiple capitals better inform how sustainable businesses or organizations are or can be?

A: It suggests that we need to look more broadly at what "value" organizations create and how they use different types of resources to create that value. We have the social (the people element), we have the ecological (everything we get from nature), and we have the technical components (money, machinery, and data). By making it more explicit and visualizing the different buckets of resources and the types of value that are being drawn upon and added to, we believe companies, organizations, and societies can get a more holistic vision of their contributions, the limitations, and opportunities for advancing sustainability of the whole.

Q: Why is food waste a sustainability problem in the United States?

A: Food waste is emblematic of the systems sustainability challenges that we have in the United States and the globe. We produce a lot, and there's loss all along the supply chain, but the bulk of where food loss happens is with consumers, in their homes and at the places they buy food. About 40 percent of U.S. food waste comes from homes, and about 30 percent from restaurants and groceries. One [issue] is the amount that we're buying, and a lot of that is perishable. But there's also confusion with date labeling. The "best by" versus the "use by" date confuses consumers and makes them think that something's not good anymore.

Q: How does the nationwide RECIPES project, in which you are participating, aim to reduce food waste?

A: RECIPES takes a systems perspective and recognizes that there's a tremendous amount of good work being done at multiple levels across the country to rescue and reuse food waste. At ID, we're building our Food Systems Action Lab, and RECIPES is one of our main projects. We are developing design frameworks to better visualize current systems, identify key players and understand what they're doing, and facilitate interactions among diverse actors in order to create more sustainable and equitable food systems.

Before You Go

On an unseasonably warm late fall afternoon, pumpkins were flung all across Ed Glancy Field on Sunday, October 23, during the 16th annual Pumpkin Launch competition. Illinois Tech students banded together to create catapults to heave the gourds, leaving them broken and busted and strung across the grass on the university's baseball field.

Photo by Michael Reiter



ILLINOIS TECH

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