WINTER/SPRING 2020

Lawrence Tech.

LAWRENCE TECHNOLOGICAL UNIVERSITY MAGAZINE





GRAND OPENING

Accelerator to support Michigan startups, LTU education & research

Turning castoffs into community center in South Africa | Media Communication grads on the move

Miniature factory teaches big lessons | LTU sports on TV | First on-campus winter Commencement | And more

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On the cover: President Virinder Moudgil and Southfield Mayor Kenson Siver share the scissors in the Oct. 4 ribbon-cutting of LTU's new Centrepolis Accelerator, located in the LTU Enterprise Center on campus. Others (L-R) are Douglas Ebert, chairman of the LTU Board of Trustees; David Coulter, Oakland County executive; Mark Brucki, LTU executive director of corporate and community partnerships; and Dan Radomski, director of the LTU Collaboratory. The joint venture with the city of Southfield, supported by state agencies and local economic development nonprofits, is intended to serve as a business incubator for manufacturers and hardware-based businesses. See story, page 2. Photo by Greg Sadler

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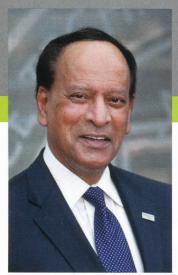
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Virinder K. Moudgil

... the Michigan Tuition Grant has provided important funding for students with financial challenges to attend Michigan's private, non-profit colleges and universities.

FROM THE PRESIDENT

With visit to Lansing, LTU goes to bat for its students

n recent years, in addressing academic programs and space needs, LTU has added five new buildings to its physical plant—almost a building a year for the last few years. In fact, we've become quite well known for adding new structures every year—dormitories, new laboratories, new athletic facilities. Most recently, we opened a state-of-the-art business accelerator for manufacturing startups in collaboration with City of Southfield and regional funding authorities.

However, make no mistake. The first priority of Lawrence Technological University has been and is its students. We make them our priority chiefly by providing a technologically advanced and well-rounded education that prepares them for rewarding and important careers. But we also take action to support the needs and interests of our students. The latest example of that came in early December, when I had the privilege of joining more than 30 of our students on a trip to Lansing to meet with state officials and our local legislative representatives about the sudden and unexpected declared elimination of the Michigan Tuition Grant and Michigan Competitive Scholarship program.

Also joining us on this visit were Lisa Kujawa, associate provost for enrollment management and outreach, and Susie Poli-Smith, director of financial aid.

Since the 1960s, the Michigan Tuition Grant has provided important funding for students with financial challenges to attend Michigan's private, non-profit colleges and universities. The grant, up to \$2,400 a year for four years, is a crucial part of many students' financial aid package.

At LTU, more than 500 of our students receive the grant, which was eliminated without warning in September in a budget battle between Gov. Gretchen Whitmer and the State Legislature.

During the Lansing visit, we met with both State Rep. Kyra Bolden and State Sen. Jeremy Moss,

who represent Southfield, and the students stressed the importance of the grant program. Happily, within a few days of our visit, Lansing reached a budget compromise that restored the program, and increased the tuition and scholarship amount to \$2,800, providing further evidence of the importance of getting involved in a representative, democratic government.

Just as importantly, those students learned that nothing is more important to this University than their futures. The faculty, administration, and staff of Lawrence Tech are willing to fight for our students' interests, which is yet another reason why an LTU education is such a sound investment.

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Virinder K. Moudgil President and CEO

The LTU delegation that visited Lansing in December.



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Lawrence Tech Alumni



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For the latest about Lawrence Tech, visit www.ltu.edu/news





Centrepolis Accelerator opens new vistas for manufacturing entrepreneurs



ational Manufacturing Day, October 4, was an appropriate impetus as Lawrence Technological University, in partnership with the City of Southfield, dedicated the

Centrepolis Accelerator—a bright, modern space with the latest in high-tech prototyping and virtual reality equipment to help entrepreneurs, designers, and dreamers create the next generation of hardware. Its mission is to "accelerate the growth of small manufacturers and hardware entrepreneurs," said Mark Brucki, CIMBA'07, LTU's executive director of corporate and community partnerships.

Located in a 6,300-square-foot suite in

LTU's Enterprise Center on the north end of campus, the Accelerator is part of the Southfield Centrepolis SmartZone and serves a wide variety of industries, from transportation to gaming, from exercise equipment to defense.

Accelerator clients and vendors set up displays for the grand opening and tours. "We work with companies that have ideas for physical products and help them bring their ideas to life," said Dan Radomski, director of the Centrepolis Accelerator.

The Accelerator has four 3D printers,

Replicators (black)

and two Ultimakers

two MakerBot

(white).

Speaker after speaker at the opening said Lawrence Tech was the perfect place to do just that.

What truly sets the Accelerator apart is its focus on manufacturing companies—startups and existing businesses that design, engineer and produce physical products. Michigan has long been a global hub in manufacturing, yet virtually all of the business incubators in the state focus on apps, software and other business services.

The Centrepolis Accelerator, in contrast, has a full prototyping shop for physical products, with an array of machine tools and 3D printers, as well as a virtual reality lab that allows



products to be designed digitally before being physically produced. All those resources were demonstrated to more than 400 guests at the grand opening and the public open house that followed.

The event also featured product demonstrations from early Accelerator clients, including Wareologie, manufacturers of magnetic buttons that allow people with dexterity limitations to continue to dress themselves; Gaddis Gaming, creator of gaming tables and accessories;

Maxfit, developers of a portable workout device; Pingree Detroit, makers of fine leather goods using reclaimed leather from the auto industry; Intecells, which is developing and commercializing a new battery manufacturing technology; and Flash Steelworks, which has a patented process for manufacturing high-strength steel that is also easy to weld and bend, developed by LTU alumnus Gary Cola, BSME'88.

Access to the Centrepolis Accelerator and all its equipment starts at just \$125 a month with a 12-month commitment. For more information, visit www.centrepoli-

manufacturing to the next generation of workers.

saccelerator.com.

Other partners in the Centrepolis Accelerator include the Michigan Economic Development Corp.; the Michigan Department of Environment, Great Lakes, and Energy; and the New Economy Initiative. Josh Hundt, executive vice president and chief business development officer at the Michigan Economic Development Corp., said the Accelerator represents LTU's longtime motto of "Theory and Practice," showing the future of

LTU President Virinder Moudgil elaborated: "The Centrepolis Accelerator is a perfect example of 'Theory and Practice.' The Accelerator will boost the economy of southeast Michigan by nurturing new manufacturing companies, and will provide valuable experience in real-world manufacturing technologies for LTU students. Accelerator clients will also have access to LTU's world-renowned engineering, business, and design faculty."

U.S. Rep. Brenda Lawrence, HD'16, D-Southfield, called LTU "a stellar leader in our community," and lauded President Moudgil for his vision and leadership.

As for manufacturing, she said, "the days of dark, dirty buildings, the days of not getting respect for working with

Leah Barton from MIRARI. an Accelerator strategic partner, demonstrates the virtual reality system that the Centropolis Accelerator makes available to its clients.

your hands, those days are over, and we need to highlight all the amazing opportunities in manufacturing. There is so much technology tied to manufacturing now."

Oakland County Executive David Coulter, noting that his father was an LTU civil engineering alumnus, called the University "an amazing partner and asset" for the county. "I continue to be very impressed by the great work you're doing here," he said. "LTU

students continue to be some of the most sought-after in the state, and for good reason. You have proven that you are an innovative and adaptive university that meets the changing economic needs of our state and our world."

Southfield Mayor Kenson Siver called LTU "a gem. We're very fortunate as a city to have the University here." And, he added, working with LTU and its partners to nurture new businesses was a logical move for the city, because it will help Southfield retain more of its home-grown talent.

Southfield City Administrator Fred kind of effort that will create new enterprises to stem the erosion of the

Dan Radomski,

director of the

Centrepolis

Accelerator,

explains the

many resources

available at an

open house in

December.

middle class. He called LTU an "incredible university" that is adding new academic programs in areas of workforce need.

David Darbyshire, BSME'87, whose father and six siblings are also alumni, praised LTU's family atmosphere, noting that university leadership was always available to anyone.

"That's our competitive advantage," said Darbyshire, whose family business, Cyb Llings, is a pioneer in 3D printing and a strategic partner of the Accelerator. "I've been to every major university out there, and the one differentiator I've noticed about Lawrence Tech is its open door policy. You can walk into any office, open any door, and find someone who will welcome you with open arms."

He also noted that LTU founder Russell Lawrence asked the business community for its workforce needs when he established the University. He called the Accelerator an extension of that kind of community outreach.

The Accelerator has benefited from the professional experience, guidance and involvement from other LTU alumni as well, including Mentor-in-Residence Lee Gorman, BSME'97, and Strategic Partner David Bolognino, BSME'95 □MR

The Centrepolis Accelerator is a perfect Zorn said the Accelerator was the example of 'Theory and Practice.'

3

Converting castoffs to construction

LTU team builds makerspace in South Africa using reclaimed material

ive a team of Lawrence Tech Blue Devil architects, engineers, and designers a week, \$1,500, and a few contacts in a South African community, and what do you get?

A makerspace constructed almost entirely of salvaged materials that can also be used for community events.

This past summer Scott Shall, associate dean of the College of Architecture and Design, and Assistant Professor Dongwoo "Jason" Yeom, led a group of 11 LTU students, recent alumni, and faculty to Port Elizabeth, South Africa, where they worked with a renowned African architect, Kevin Kimwelle, on the project. Kimwelle and Shall met a few years ago and have been discussing architecture using found and recycled materials ever since

The group landed in Cape Town and traveled to a farm about two hours away to do a warmup project—build a baboon-proof greenhouse in 24 hours using only materials found on the farm. "It was made of stuff we found there, right down to the hardware," Shall said.

From there, it was another six hours overland to Port Elizabeth, a city of 300,000 on South Africa's Indian Ocean coast. "We took a couple of days to investigate the site, scavenge materials, and create a design," Shall said. "The next day we started construction, a process that we finished seven days later."

The students and recent grads stayed at a nearby youth hostel, while Shall and assistant professor Dongwoo "Jason" Yeom stayed with Kimwelle.

The LTU crew built a wood frame and metal building, with about 300 square feet under roof and a larger open-air space, on a lot donated to Kimwelle. Most of the material used was from pallets salvaged from an Isuzu automobile plant. The team bought only the concrete used for the foundation, a few larger



The LTU crew gathers around the completed project near the end of their stay in South Africa.



LTU assistant professor Jason Yeom attaches purlins for the roof structure of the makerspace.



wood pieces for columns, the corrugated metal walls, and a bit of hardware. No heavy equipment was used—everything was dug or installed by hand.

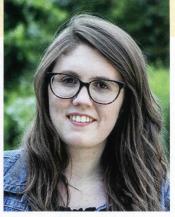
The LTU group also bought tools such as saws and welding gear, which stayed behind with the building to seed the maker-space and support future work.

"The idea is that this work is planted in the community. Over time the community will use it both as a place for construction and a precedent illustrating the powerful potential of reclaimed

material," Shall said. "Although community events and vocational programming will be held there, the primary function is as a makerspace."

Shall plans to return next year with another LTU team to partner with members of the community on construction projects in the townships, areas where black South Africans were forced to live during apartheid, many of which still face numerous challenges.

Bethanie Martin, MAr'18, MUD'18, was one of the alumni in the group. Her firm,



Bethanie Martin

Pittsburgh-based Urban Design Associates, was founded by a South African, which made her pitch to go along "a pretty easy sell."

The group was inspired by visting a former abandoned warehouse in Port Elizabeth that has become a bustling,

expanding artists' colony and makerspace. "You just know that the little building we created is going to see that same kind of future—it's going to grow and expand," Martin said. "Immediately after we took our group picture with the building, Kevin and his group began moving materials into it, saying 'OK, we need to use this space now."

Martin said the experience of working on a limited budget with found materials is valuable to a designer "because you're going to work with clients who have the same issues—they have only so much money and can't afford every extravagant material that they might want."

Nelson Mandela University, formed in 2005 through the consolidation of four Port Elizabeth-area colleges and universities, is interested in forming a permanent relationship with LTU for future projects.

Shall said the work consumed most of the group's time, but "we did get to spend some time on an elephant refuge, driving around this vast terrain with elephants and hyenas and zebras—and lions, we were told. We didn't see any, but there were signs warning of them."

The group also enjoyed South Africa's blend of European and African culture—and cuisine, which ranged from Ethiopian food to South African barbecue to "American bar food."

"I would love to go back, stay involved, do whatever I can to support this work," Martin said. $\square MR$



The sun slants through the largely openair structure built mostly of reclaimed materials.

Media Communication alumni find

degree in media communication from Lawrence Tech opens a range of career opportunities. Two recent graduates landed at a Lansing TV station, while another used his experience reporting on LTU athletics to transition into marketing for a sports equipment supplier.

Sara Schulz, BSMC'18, is senior news photographer at WILX TV, the NBC affiliate in the Lansing-Jackson market. She's a native of Novi who applied to 10 colleges and universities. Why LTU?

"LTU was a last-minute decision for me," Schulz said. "We were looking for media programs with bowling teams that could offer an athletic scholarship, which was pretty rare."

What sealed the deal was visiting the campus and meeting with Jody Gaber, director of LTU's media communication program. "We got to do things related to our major from day one. That was the biggest selling point for me, not having to wait for two years to get into video editing. Most schools did not allow me to get behind a

camera my first year, which is what I really wanted to do."

Another selling point, Schulz said, was LTU's mix of tenured faculty and adjunct faculty working in industry. In her case, that meant adjunct professors Mike Ward and Gail Offen, veterans of the Doner advertising agency, and local media veterans Randy Henry, Roop Raj, and Cheryl Chodun on the news side.

"Having classes with them really opened my eyes to the broadcasting and TV field, and sparked my interest in day-today storytelling of everyday folks," Schulz said.

Schulz also credited former adjunct professor Daniel Hackett and current adjunct Phillip Swantek for their expertise in videography. She had an internship at Southfield's Mort Crim Communications, where Swantek was her boss. And she kept up her bowling, serving as captain of LTU's women's team for three seasons.

When Schulz graduated in 2018, Chodun was instrumental in her job search.

Also working at WILX is Rachel Sweet, BSMC'17, a graduate of Walled Lake Central High School and the daughter of LTU adjunct mathematics and computer science faculty member Ben Sweet. "My father encouraged me to start here, and I fell



Lawrence Tech's first football game in 2018 reporting for the first installment of the LTU Sports Report television

Gabe O'Neil was on the sidelines at

Rachel Sweet, shown here in the WILX studio in Lansing, likes the variety of stories she covers as a news reporter.

in love with it and didn't want to leave," Sweet

Sweet wasn't originally a media communication major, starting out in chemistry, then

moving to audio engineering technology. But eventually, she said, "I realized being on camera was something I wanted to do, so I switched."

Sweet was a student-athlete at LTU, competing on the women's soccer team, and Miss Lawrence Tech 2012. She landed internships at the sports radio station 97.1 The Ticket and the Road Commission for Oakland County, producing videos. After an internship at WDIV-TV's Live in the D morning show, she became an associate producer on the show. She joined News 10 as a producer and multimedia journalist in February 2019.

Sweet loves the variety of the news business in Lansing. "It's always random," she said. "Last weekend I got to cover a Consumers Energy Day, where among other things they talked to kids about turning poop into power. I'm at the State Capitol a lot. I've been in scrums with the governor—and since I'm short, that's been interesting. I get to see bills being passed and I get to knock on people's doors at the Capitol."

Sweet said the LTU media communication program taught her how to both write copy and operate sophisticated electronic equipment. Her time in the audio engineering program, which included a certificate, also taught her about the electronics bedifferent career paths



Sara Schulz is a senior news photographer at WILX TV-10, the NBC affiliate in the Lansing-Jackson market.

hind that equipment.

Chodun was her primary mentor. "She taught me a lot

about techniques to use in front of the camera," Sweet said. "Roop Raj was a big help as well. He taught me to be less serious and more conversational in my writing."

Sweet also praised Corinne Stavish, director of LTU's technical and professional communication program. "That was a hard class," Sweet said. "She taught me so much about how to talk to people, right from wrong, the ethical standpoint."

Finally, Sweet credited adjunct faculty Holly Helterhoff who "taught me a lot about social media, how to be professional with it."

While Lansing-Jackson is indeed a smaller media market—No. 110 on the list of 210 U.S. media markets between Reno, Nev. and Lincoln, Neb.—it frequently makes big news because it's a state capital.

"It's a small market numbers-wise, but it's a medium-to-large market news-wise," Schulz said. "I see the governor a lot. You get to tell the stories of some pretty big players in the state. We have MSU, a major university, and a lot of news comes out of there. So you get a taste of what it's like to cover big events."

After graduation, Gabe O'Neil, BSMC'17, parlayed an internship into a full-time job at Yellow Flag Productions as producer of the LTU Sports Report on Fox Sports Detroit. He also



Former WXYZ TV-7 reporter Cheryl Chodon has served as a mentor for media communication students at Lawrence Tech.

worked as Yellow Flag's social media manager.

O'Neil got hooked on journalism working as a sports reporter on the school paper at Bishop Foley Catholic High School in Madison Heights. Then he took a video production class and loved that as well. And he loved lacrosse. So he looked for a university where he could pursue all those interests, and wound up at LTU. "It was the right fit for both academics and athletics," O'Neil said.

O'Neil landed an internship at WDIV the summer between his sophomore and junior years that cemented his career path. "It was a lot of answering cold calls, people who thought they had news stories, and if it was newsworthy I would give it to a reporter and a photographer and they would go out," O'Neil said. "I also had a chance to go in the van and help cover stories."

In his senior year, O'Neil interned at Yellow Flag, working on a high school football scoreboard show that aired on WXYZ-TV. That segued into an internship in social media marketing, and in the fall of 2017, a full-time job. Recently he moved to Warrior Sports in Warren, where he is a brand manager.

O'Neil also praised Stavish as "tough, but helpful and very motivating." Gaber and physics professor Scott Schneider were among his favorite professors.

The three students also have big long-term plans. For Schulz, it's late night TV. "News is great for learning how to do things live, and how to work on tight deadlines, but I really love late night television, and if I could work for any of those hosts, that would be fantastic."

For Sweet, it's moving into entertainment TV, with a long-term dream of hosting her own lifestyle show.

As for O'Neil, "I'm leaning toward more of the marketing part of what I do right now. Originally I thought I might want to be an on-camera personality or a sports reporter, but I've come to enjoy the producing and marketing part of it. I want to stay in the sports world, but there are a lot of cool opportunities with a lot of brands," such as his work with Warrior Sports.

Chodun praised all three students for their performance in her TV news production and performance classes. "I couldn't be more proud," said Chodun, who spent 25 years at WXYZ TV-7 as a reporter before turning to education. "People ask me if I miss being on air. I tell them I get that same feeling when my students succeed. You feel like you're making a difference."

Chodun said the three LTU graduates "have great personalities. They have perseverance. And they have a real love for what they're doing. What could be better than that?" $\square MR$



award from LTU President Virinder

Dean Nabil Grace.

Moudgil and College of Engineering

Industrial Engineering lab propels LTU students into the digital future

awrence Technological University took another significant step forward in digital engineering with the opening of the Siemens Electro-Matic Industrial Engineering Laboratory in November. The lab is located in the oldest building on campus, yet it offers students a portal into the future of engineering, manufacturing, and commerce.

Industrial engineering deals with the optimization of complex processes and systems. Industrial engineers work to eliminate wasted time, money, energy, and materials. LTU offers fully accredited bachelor's and master's degree programs in industrial engineering, and a master's degree in industrial management.

The lab is the result of a collaboration of several companies committed to embracing the digital future of all aspects of commerce and industry. Siemens Corp, the U.S. subsidiary of Siemens AG of Germany, was the founding sponsor with a donation that included software, equipment, and funding. Farmington Hills-based Electro-Matic Products Inc. was also instrumental in the lab's creation.

Other support came from LTU alumnus Henry Horldt, BSIE'55, PE, Detroit-area locations of French auto supplier Faurencia, Cintas Corp., Sylvania Osram, SAS

contributors have provided more than \$500,000 in hardware and software, enabling LTU industrial engineering students to study everything

from the human factor of production-line fatigue to the optimal placement of robots, sensors, and parts bins on the factory floor.

At the grand opening ceremony, Siemens was also named Lawrence Tech's Corporate Partner of the Year in recognition of numerous contributions to the College of Engineering. Raj Batra, BSEE'90, president of Siemens Digital Industries US, accepted the award and delivered the keynote address.

"The opening of this first industrial engineering lab is a milestone, putting top-notch technologies into the hands of manufacturing's next generation," Batra said. "LTU is building the vital talent pipeline that industry so desperately needs to run hightech operations. And as technology evolves, so too will this lab, creating a perennial annuity of talent available to industry."

With its motto of Theory and Practice, Lawrence Tech is the perfect place to prepare the engineers of tomorrow.

"This lab gives students the opportunity to take the theory that they have learned in the classroom and marry it with the practice in the lab setting," Batra said. "This is real world, pragmatic practice."

College of Engineering Dean Nabil Grace thanked Batra for helping the University advance its mission of preparing its students for the future of engineering.

"Raj Batra has raised the bar this high," Grace said as he extended his hands high above his head. "Our mission is to produce engineers who will be the leaders of tomorrow. Our graduates hit the ground running in their professional careers, thanks in large part to LTU's partnerships with Siemens and other forward-thinking companies that provide invaluable support to the University."



An industry-grade conveyor line and programmable robot can perform simple assembly operations and pick-and-place inventory functions. Students can design the best assembly line operation sequence to accomplish assigned tasks,

By having access to an industrial digital platform widely used around the globe,

LTU students can simulate in the lab what is happening in factories and plants, both large and small, across a wide spectrum.

"LTU can play a key role in changing the perception that many people still have—erroneously, of course—that manufacturing is a low-tech segment that might as well be out-sourced to another country. Nothing could be further from the truth," Batra said. "More and more, companies are understanding the importance of customer proximity, customer input, and customer engagement."

The versatility of digital engineering is demonstrated by the support of Cintas, the uniform supplier that now offers a variety of services to industry.

The new industrial engineering lab includes:

- ✓ An industry-grade conveyor line and programmable robot capable of simple assembly operations, pick-and-place inventory functions, and loading and unloading. Students can design the best assembly line operation sequence to accomplish various assigned tasks.
- ✓ Programmable Logic Control (PLC) units used to simulate setting up industrial automation systems.
- ✓ The instrument panel of a RAM 1500 truck, which students can program to create various displays and functions.
- ✓ An industrial work station, provided by Faurecia, where students perform various mechanical functions using several tools on various objects.
- ✓ An assembly area where students manually assemble LEGO race cars with parts stored in 200 bins.
- \checkmark A coordinate measurement machine used for quality inspection of parts.

Since 2013, LTU has received two major in-kind software grants from Siemens. The University now uses the Xcelerator portfolio of software including NXTM software for computeraided design, manufacturing and engineering; Tecnomatix®, the industry-leading digital manufacturing software; the FibersimTM portfolio of software for composites engineering; SimcenterTM STAR-CCM+ and Simcenter Amesim, a robust suite of simulation software and test solutions; and Solid Edge® software, a hybrid two- and three-dimensional CAD system.

"We are a proud partner of LTU," Batra said. "It's truly great to see how LTU is driving the education of the next generation of digital talent."

The University is equally proud of Batra, a 2017 recipient of the Alumni Achievement Award, who is at the forefront of the digital revolution in commerce and industry. "Raj Batra's career serves as an inspiration for our engineering students and recent graduates," President Virinder Moudgil said. "They will set their sights higher after seeing what he has accomplished." □EP

Horldt gift funds new industrial engineering lab

Henry Horldt, BSIE '55, PE, has made a very generous contribution to the new Siemens Electro-Matic Industrial Engineering Laboratory.

"Industrial engineers analyze systems of all types to minimize waste of assets such as time, money and energy," explained Horldt. "I am very impressed that the University is focusing on industrial engineering. When I heard the students were getting a new IE lab, I wanted to be a part of this tremendous opportunity."

Horldt said he was especially impressed with the "energy and enthusiasm" of Ahad Ali, associate professor of mechanical engineering and director of LTU's industrial engineering program. In response, Ali said the lab would not be possible without the support of Mr. Horldt. His endowed gift will be used to purchase and maintain the lab's equipment so generations of students can apply the Theory and Practice they learn in the classroom to a real-world setting.

The LTU industrial engineering program currently has 75 students—15 undergraduates and 30 graduate students majoring in industrial engineering, and 30 graduate students in engineering management. Horldt is proud of the fact that the IE program is gaining momentum. "It's what industry has always needed," he stated.

Horldt received his first degree in mechanical engineering from the University of Michigan in 1947 before continuing his studies in industrial engineering at Lawrence Tech. He found the classes at LTU couldn't be matched by other schools, because the teachers had industry experience. "What I learned at Lawrence Tech was of great assistance in my career," he said.

Horldt was in the last class to graduate from Lawrence Institute of Technology's Highland Park campus. It was located next to Ford's Highland Park assembly line. "You could hear machinery running in the background," Horldt said. "Ford was making parts for tractors. Little did I know that a few years later I would be making those same parts in my own shop."

After receiving his industrial engineering degree in 1955, Horldt was asked to develop and teach a course in manufacturing methods and equipment. He taught as an adjunct instructor, at LIT's new campus in Southfield, for over two years.

Horldt began his career by working for several engineering firms in their tool and die shops. "People couldn't understand why a college graduate would go into an apprenticeship program. But I wanted that background," he said. "That way, if I ever ran into a problem, I would know what it's like to get my hands dirty."

Horldt quickly gained valuable experience, and with the encouragement of his wife Barbara, Horldt started his own firm, Leader Machine Products in 1972. He was 48 years old at the time; considered "advanced" for starting a new manufacturing business. "My first shop was smaller than my family room," he said. But by the time he sold the company in 1992, it had 75 employees and took up 33,000 square feet in a large industrial park in Westland.

He adamantly credits his business success to Barbara, a Navy veteran whom he married in 1952. She supported him when he worked long hours, or had to leave the dinner table because the shop needed him. Barbara also helped her husband with the business, managing the books and reviewing correspondence. "Unless your wife says, 'I'm behind you,' don't even think about starting a business." $\square EP$



LTU President Virinder
Moudgil and
Raj Batra lead
the applause for
Henry Horldt, a
1955 industrial
engineering
graduate who
made a generous contribution to the new
industrial engineering lab.

State Champs

provides increased visibility for LTU

etting the attention of high school students is an ever-ending battle for Lawrence Tech's Admissions staff and Lisa Kujawa, associate provost for enrollment management and outreach. But she has found that coverage of high school sports is a sure-fire way to cut through the clutter that confronts high school students trying to decide where to go to college.

What started as a sponsorship of State Champs, a cable television program covering high school sports in Michigan, has turned into a multi-faceted partnership that has benefitted the University and its students as well as Yellow Flag Productions, which produces State Champs and several other programs from studios on the Lawrence Tech campus

In 2015, Yellow Flag Productions moved into a 4,500-square-foot suite in LTU's General Services Building on the north end of campus. At any given time 10 students are working as interns with the production company, learning the nuts and bolts of video production both in front of and behind the camera.

What Kujawa likes most about the relationship is that it continues to grow. "State Champs has been a dominant force in our success in undergraduate admissions, and as they continue to expand they find new ways to support our mission," she said.

Kujawa first came into contact with State Champs as a parent when her son Scott Kujawa, BSBA'16, was competing in the Michigan high school bowling championships. State Champs covered the event and then provided her with a video. She became a viewer of the weekly State Champs show that covered high school sports around the state and saw the marketing potential for the University.

In 2014, Lawrence Tech became the primary sponsor of State Champs. Several surveys have documented that more than half of current undergraduates first heard of LTU through State Champs.

Bruce Annett, LTU's vice president for marketing and public affairs, agrees that State Champs has given LTU a leg up in the competition to gain the attention of prospective college students. "Other colleges envy us because State Champs is so professional. Their video, reporting and graphics are first-rate."

LTU's role as the primary sponsor of State Champs paid dividends when coverage was expanded into Indiana several years ago. Yellow Flag Productions plans to expand coverage to Ohio and Wisconsin next, and eventually add Illinois. "That's the same market that LTU wants to penetrate, and the University has the right of first refusal to sponsor those shows as well," said Lou Bitonti, the founder and president of Yellow Flag Productions.

Bitonti was a marketing executive at Chrysler for 30 years, starting out in the Lee Iacocca era and ending up as the global marketing manager for Jeep. Looking for a way to reach the youth market for the launch of the Jeep Wrangler, he came up with the idea of giving recognition to high school athletes.

"Not just football, and not just the big schools, but all high school sports teams," Bitonti recalled. "Most kids playing high school sports were getting no recognition. I wanted to give these kids a chance to be part of something that was recognized."

Bitonti started the State Champs television program in 2002. It continued to grow each year and then hit a real growth spurt after gaining LTU as a major sponsor and moving its production studios to the campus. It now employs 12 full-time and 30 free-lancers, including numerous media communication and graphic design students from LTU. This past fall State Champs



covered 50 football playoff games in Michigan and another 20 in Indiana, assembling highlight packages with interviews and game footage for each.

The relationship with Yellow Flag Productions has coincided with the flowering of LTU's athletics program, which now has 29 varsity teams. Bitonti, who coached football at Brother Rice High School for many years, provided guidance for the roll out of the football team in 2018.

The expansion of LTU's sports teams, which has provided a major boost in undergraduate recruitment and enrollment, led to the introduction of the LTU Sports Report, a weekly recap of LTU athletics that aired 24 times during the 2018-19 academic year on Fox Sports Detroit. LTU sports now accounts for about a quarter of all coverage provided by Yellow Flag Productions.

Yellow Flag provided more synergies for LTU's admissions outreach with the introduction of the RoboZone show covering robotics competitions, and eSports covering gaming competition at the high school and college level.

RoboZone got its start in 2015 after a one-hour documentary of robotics competitions in Michigan won a Michigan Emmy. The show has expanded to year-round coverage that includes extensive reporting on LTU's Robofest, a robotics competition for students starting in elementary school founded by computer science professor C.J. Chung.

"Our wheelhouse is high school sports, but the RoboZone is broadening our reach to young kids and college students," said Denver Rochon, Yellow Flag's creative director who over-

and its sports teams



Lou Bitonti



Genna Skalski, right, has become the on-air co-host of the weekly State Champs TV show with sports broadcaster Lorne Plant. sees RoboZone. "These events are incredibly popular. The teams have mascots and it's just like any other sporting event. It gives kids who aren't interested in athletics a chance to compete."

In 2017, Yellow Flag introduced its eSports show covering competitive video gaming at the high school and college levels. Its staff helped create the University's eSports arena, which is

popular with many LTU students. (See related story on page 14.)

This expanded coverage has also provided many opportunities for LTU students majoring in media communication. Students shoot most of the video at LTU contests, as well as covering high school events for State Champs. They conduct interviews, put together highlight packages, and assist with streaming online. Some media communication students get involved in editing, including Genna Skalski, BSMC'20, who has become the on-air co-host of the weekly State Champs show.

As an intern Skalski got the opportunity to report on camera, do voice overs, write scripts, shoot and then edit video, and do

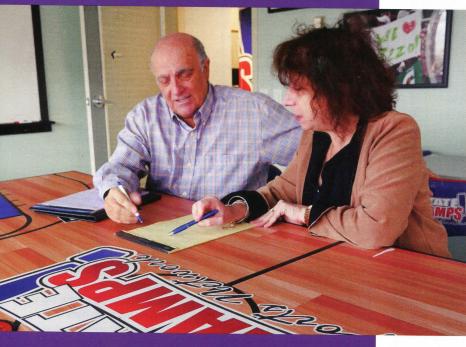
Lisa Kujawa, associate provost for enrollment management and outreach, goes over a promotional plan with Yellow Flag's Lou Bitonti. interviews. "They gave me the opportunity to grow," she said.

Her big break came with State Champs host Lorne Plant brought her on as co-host. "At first I wasn't very confident and I looked like I was going to cry," she said. "Lorne took the time to tell me how to create my on-air personality

and read a script. He also gave me advice on how to write a script, which has improved my writing."

Skalski sees more opportunities ahead at Yellow Flag Productions now that State Champs has transitioned from airing on Fox Sports Detroit to streaming on the internet at the beginning of the year. The new format will lead to much more flexibility and more content, including the new "Hang Time" high school basketball segment that she is editing and presenting.

The experience gained at Yellow Flag Productions has also moved her closer to her career goal of working for the MLB Network. "What I like best are the connections I've been able to make," she said. $\Box EP$



'State Champs has been a dominant force in our success in undergraduate admissions.'

On Campus

Biologist named new dean of College of Arts and Sciences

Srini Kambhampati began his tenure as the dean of the College of Arts and Sciences in August 2019, succeeding Hsiao-Ping Moore, who has retired.

Kambhampati comes to LTU from the University of Texas at Tyler, where he was associate provost for research. Earlier, from 2011 to 2017, he was S.A. Lindsey Professor and Chair of the Department of Biology.

Kambhampati started his career at Kansas State University in 1992. He was promoted to professor of insect genetics in 2002.

In addition, Kambhampati was a by-fellow in the Laboratory of Development and Evolution at the University of Cambridge in the United Kingdom in 1999, and an assistant faculty fellow and postdoctoral research associate at the University of Notre Dame from 1987 to 1992.

He has authored or coauthored more than 70 scholarly papers and has been involved in grant applications that led to more than \$5 million in research funding for the institutions where he taught.

Kambhampati received his Bachelor of Science in Agriculture from Andhra Pradesh Agricultural University in India, and his master's degree in pest management and PhD in biological sciences from Simon Fraser University in Canada.

Kambhampati said he came to LTU in part because he liked "this challenge of being dean of the college that is teaching liberal arts and sciences in this sea of engineering and architecture and design. And I want to build up this college to be much more than a college that just offers core classes. I thought this would be a good challenge."

He said he built up the

research effort at UT-Tyler, and hopes to do the same at Lawrence Tech, in part through new hires.

"We're going to see if we can hire people who are interested in doing research in areas that are relevant and topical, and also very fundable," he said. "One of the things I'd like to do is to develop research funding as a third revenue stream, along with tuition and endowments. Our government spends huge amounts of money on research, and there are multiple sources of funding in almost any area of study you can imagine."

Kambhampati said he's also interested in more emphasis on computer science—"It's so pervasive everywhere, you cannot escape it," he said. He plans to promote interdisciplinary research by combining computer science with chemistry, biology, mathematics, psychology, and literature.

"There is no bad side to research," Kambhampati said. "It attracts better faculty, it attracts better students, it helps in student retention and engagement, and it helps with faculty retention."

""

"MR"

Physics professor wins federal grant to model subatomic particle properties

Lawrence Tech physics professor George Moschelli, BSPh'03, has won a three-year, \$179,997 grant from the National Science Foundation to model the behavior of superheated "soups" of subatomic particles that were formed in the earliest moments after the Big Bang.

Moschelli said the ultimate goal is a better understanding of what's called the strong nuclear force.

The grant will fund theoretical modeling of the properties of quark-gluon plasma, a hot and dense soup of quarks and gluons, the elementary particles

that are most affected by the strong nuclear force.

Moschelli's work will focus on theoretical methods for modeling the expansion and cooling of quark-gluon plasma created by collisions in huge particle colliders. The methods will help guide future research into the behavior of these elementary particles.

Moschelli is recruiting undergraduate physics majors, offering them a chance to be presenters at global scientific conferences.

Moschelli said the students working with him will be exclusively undergraduates, "and since most physics undergraduates will find careers outside of science, they will apply this education in many roles in society."

The grant provides for student research assistant salaries and domestic and international trav-

Srini Kambhampati, the new dean of LTU's College of Arts and Sciences, discusses research procedures with George Moschelli, an assistant professor of physics who is doing theoretical modeling of the interaction between quarks and gluons.

el to conferences and research centers like the Large Hadron Collider in Europe.

After earning his bachelor's degree from LTU, Moschelli earned a PhD in physics from Wayne State University. Prior to joining LTU in 2013, he was a lecturer at Norwich University in Vermont, and previously was a postdoctoral researcher at the Frankfurt Institute for Advanced Studies in Germany.

Moschelli said the effects of subatomic collisions at huge speeds has been his research interest since his student days. The way particles behave in conditions created by particle accelerators—giant electromagnets that accelerate atomic particles to a significant fraction of the speed of light, then smash them into each other, mimicking conditions shortly after the Big Bang—helps explain how the strong atomic force helps glue atoms together, despite their magnetic repulsion. It's called the strong force because it's more than 100 times stronger than the more familiar electro-





Building better collaboration, one conversation at a time

How do you get no-nonsense engineers and other highly skilled technical professionals—the civilians who support the development of tanks and other vehicles for the United States Army—to become more collaborative? To answer that question, Army brass turned to LTU business professor Jacqueline Stavros.

In June, Stavros and her team of LTU facilitators hosted 120 of the thousands of engineers, program managers, and technical staff that are a part of the U.S. Army's "Team Warren" for a two-day summit called "Capabilities Collaboration: A Strategic Conversation."

Together they built a framework based on a shared vision and commitment to improve collaboration across organizational and functional boundaries.

The summit used the "Appreciative Inquiry" 4-D Cycle (Discover, Dream, Design, and Deliver) from the best-selling business book co-authored by Stavros, "Conversations Worth Having: Using Appreciative Inquiry to Fuel Productive and Meaningful Engagement."

The discussions also followed a strategic thinking, planning, and leading framework designed by Stavros called SOAR, for Strengths,

Opportunities, Aspirations, and Results. It asks participants to identify the organization's strengths that can be built on; opportunities, or what its stakeholders are asking for; aspirations, what the organization cares deeply about; and results, how an organization knows it's succeeding.

The 120 participants worked in teams of six participants per table. The first day, the tables were split across work group areas, from platform engineering to vehicle power and mobility to cybersecurity. They were asked to imagine the future of the organizational partnership—a future where the technical and program management part of Team Warren has become everything they imagined it could be and more.

They identified images of the future that filled them with the most energy, enthusiasm, and calls to action. Then they identified specific areas for improving collaboration, workforce development, and growth.

On the second day, with tables now representing functional capability work groups, participants were asked to identify their individual and group strengths, creating a vision for the working group's future, including collaboration oppor-

tunities for their work group and the whole system.

Stavros has conducted similar exercises for groups ranging in size from 15 to 800 people. "This is replicable and scalable," she said. "Every organization should be having strategic conversations that fuel productivity and meaningful engagement like Team Warren is doing. People will commit to that which they have co-created—this creates positive work environments that work for all."

Army representative Keith Schweizer was pleased with the results. "The ability to bring our organizations together to discuss our strengths, share dreams, and collaborate is invaluable. It creates abundant opportunities, creates trust, and highlights our shared purpose. We will use the data and outcomes of the event for the betterment of Team Warren for years to come," he said. \(\square\$MR\)

Stavros helps organizations SOAR with expanded book



Jacqueline Stavros

Toys, markers, construction paper and glue can be used to convey complex workplace management ideas.

Professor Jacqueline Stavros of LTU's College of Business and Information Technology has released the second edition of "The Thin Book of SOAR: Creating Strategy that Inspires Innovation and Engagement." It offers an alternative framework for strategic thinking, planning, and leadership at all levels of organizations.

SOAR stands for strengths, opportunities, aspirations, and results. SOAR analysis is a method of creating strategic plans through shared conversations, collaboration, and commitment to action by all stakeholders.

This tool differs from the commonly used SWOT (strengths, weaknesses, opportunities, and threats) analysis. SOAR engages all levels and functional areas of an organization, while SWOT is typically a top-down approach. "SOAR builds on the organization's strengths and produces greater results than spending time trying to correct weaknesses," Stavros said.

Stavros and co-author Gina Hinrichs, a Chicago organizational change consultant, published the first edition in 2009. The framework has been used by individuals, teams, entrepreneurs, and business leaders in for-profit, non-profit, and government organizations throughout the world.

With SOAR, the focus is on leveraging strengths and identifying opportunities that support stakeholders' aspirations. Strategic planning extends beyond the conversations of senior leaders to include other stakeholders inside or outside the organization. □MR

Physics professor CONTINUED

magnetic force, and therefore much more difficult to study.

Moschelli said the project is basic science with unknown practical application. But he said there's no telling where it might lead. "A hundred years ago people were talking about quantum mechanics for the first time, and people probably wondered whether this was just knowledge for knowledge's sake," he said. "But now everything in our lives, all our electronics, the ability to have semiconductors and transistors that are very small, is a product of quantum mechanics. All that was born out of basic science from decades ago."

MR

STEM Center ramps up outreach

The Marburger STEM Center is headed into its fourth year of outreach to K-12 students on the wonder and fun of studies and careers in science, technology, engineering, and mathematics, as well as the arts and architecture. That outreach runs the gamut from busy summer camps to Saturday science programs to a doll house.

Yes, a doll house.

Last year, STEM Center **Executive Director Sibrina Collins** earned nationwide attention by publishing an academic paper on a fascinating exercise asking chemistry students if Vibranium, the fictional element in the movie, "The Black Panther," actually existed, what would be its properties and where it would be placed on the Periodic Table of the Elements. One reason for that exercise was to celebrate the character Shuri, Black Panther's younger sister, who is a brilliant scientist in the movie's nation of Wakanda.

Earlier this year, LTU architecture student Austin Hurrell designed a laboratory for a Shuri action figure, based on the design in the movie. It was designed in computer-aided engineering software and built on LTU's biggest 3D printer. More than two feet in each dimension, it took 110 hours to print.

"Now we're going to build or buy some doll-sized lab equipment," Collins said. "We'll use it as a workshop for younger kids to get them interested in design and architecture and science careers. I had doll houses when I was a kid. If Barbie can have a dream house and a penthouse, Shuri can have a lab."

In 2019, LTU's summer science camp attracted nearly 230 students, 88 from out of state. Most lived in LTU's residence halls for their weeklong camps, and 119 received full or half scholarships. During the 2019-20 academic year, LTU's Extreme Science Saturdays will cover math that cures disease, entrepreneurship, forensic science, and careers in drone technology.

"A lot of times, people think, 'I have a degree in X so I can only do X.' We need to foster an entrepreneurial spirit and get people to think more creatively about their career path," Collins said.

The STEM Center will engage with more K-12 students now that Jaclyn Smith has joined the team as outreach coordinator. A former high school biology

teacher and educator at the Detroit Zoo, she will also lead the STEM Center's Student Ambassador program. "We need to develop a robust pipeline starting with our sophomores, preparing them to lead workshops. I also want to work more closely with our athletes, training them to bring workshops into K-12 classrooms. A lot of STEM students are in sports, and athletes are very good at time management," Collins said.

The STEM Center also sponsored more screenings of

STEM Center Executive Director Sibrina Collins talks with a student at LTU's summer science camp.



"Women Untold," the movie about unsung science pioneers who were women of color, produced by a team of LTU media communication students. The film was shown to the Metropolitan Detroit Science Teachers Association in August, followed by a discussion of how they plan to use it in the classroom. It was shown at Girls' STEM Day at the Michigan Science Center, a program of the Women of AT&T. $\square MR$



LTU architecture major Austin Hurrell designed this dollhousescale laboratory for the action figure of Shuri from the popular movie, "Black Panther."

eSports arena brings competitive video gaming to campus

Lawrence Tech has turned a former meeting room into a high-tech haven for video game players in a fast-growing student competition called eSports, a form of competitive video gaming usually played by teams in tournaments that are streamed online.

The new LTU eSports arena has 12 custom-built gaming computers with 4K monitors, a coach's station, and a 4K big-screen TV for spectators to watch in real time and for players to go over game film after a competition. The equipment also includes video gaming chairs and high-end headsets.

The arena was co-developed by LTU and Yellow Flag Productions, a Southfield-based media company that produces "State Champs," a weekly TV show on Michigan high school sports, a high school robotics TV show, and the weekly "LTU Sports Report," seen on Fox

Sports Detroit. See story, page 10.

According to a report from the gaming industry analytics firm Newzoo, eSports revenue surpassed \$1 billion in 2018, up 27 percent from a year earlier, with a worldwide audience of participants and fans topping 400 million. In Michigan, many high schools and colleges are organizing teams. At LTU, more than 100 students participating in eSports through several club teams make regular use of the new arena.

Earlier this year, 48 teams competed online in "League of Legends," LTU's annual eSports

Continued

eSports CONTINUED

tournament for high school students. The event is the largest in the Midwest. The 16 finalists were invited to a Saturday showdown at LTU, and the final match was taped by Yellow Flag and shown on Fox Sports Detroit.

The winning and runner-up teams received LTU scholarship offers worth up to \$64,000 over four years. Nearly a dozen students over the past three years have taken advantage of those scholarships to attend LTU, according to Lisa Kujawa, LTU's associate provost for enrollment management and outreach.

"Lawrence Tech's legacy in design, technology, and innovation makes this the perfect place for a gamer to attain the skills necessary to develop a professional career," Kujawa said. "Technology is changing faster

in every industry."

Yellow Flag Productions identified the growth of eSports across many audience demographics three years ago. "LTU provides the right curriculum for gaming, campus culture, and the opportunity for students to represent the University," said Lou Bitonti, president of Yellow Flag.

An official LTU student organization, LTU eSports, was chartered during the 2018-19 academic year with Marshall Ashton, director of LTU's Bachelor of Fine Arts in Game Art program, as the faculty advisor.

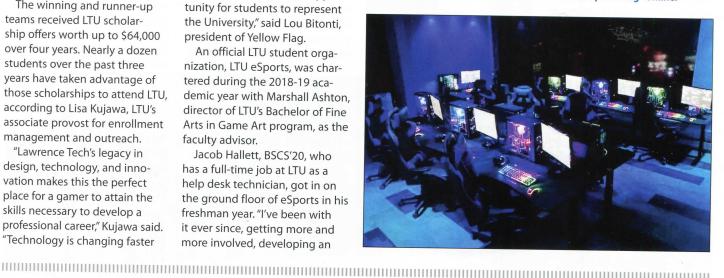
Jacob Hallett, BSCS'20, who has a full-time job at LTU as a help desk technician, got in on the ground floor of eSports in his freshman year. "I've been with it ever since, getting more and more involved, developing an

organization," he said.

Tim Chavis, LTU's chief information officer, said the University's policy of providing students with high-end laptops makes it easier for LTU to host eSports tournaments. Other schools might have to spend hundreds of thousands of dol-

lars on laptops for participants, "but here, we just pull them off the shelf." \(\simegaMR\)

The new LTU eSports arena features playing space for 12 participants, plus a coach's station and a large screen for onlookers to watch the action, although most eSports fans do their "spectating" online.



Partnership adds anti-poverty studies to MBA program

Lawrence Tech MBA students are studying possible solutions to poverty and addressing social and economic inequality through the lens of business, thanks to a groundbreaking partnership between the University and The PuLSE Institute (Institute for Public Leadership and Social Equity), Detroit's anti-poverty think tank.

"This partnership will integrate addressing poverty and promoting social inclusion into our MBA program," said Bahman Mirshab. dean of LTU's College of Business and Information Technology.

Tina Patterson, president of The PuLSE Institute, called the partnership unique and timely in view of the pervasive poverty rampant in Detroit and around the region.

"When we think about solutions to poverty, we often

exclusively look toward policy resolutions through government and elected officials instead of employing a multidimensional approach," Patterson said. "The business sector, in particular, is regularly isolated and even shielded from the discussion, yet corporate social responsibility is a necessary area of focus given the rising wealth extremes between businesses and the communities they serve."

In studying the work of PuLSE, Lawrence Tech's MBA program is instilling in students a responsibility to address poverty through business solutions. These corporate leaders of the future will approach business in a different, more expansive dynamic that will have a greater impact in their local communities and global society.

Launched in 2018, The PuLSE



Bankole Thompson of The PuLSE Institute addresses the Detroit Economic Club.

Institute was inspired by the writings of journalist and author Bankole Thompson, whose work has elevated the discourse around poverty and inequality in Detroit and the region. Thompson is editor-in-chief of the Institute and an opinion columnist at the Detroit News.

"Lawrence Technological University and The PuLSE Institute are embarking on an unparalleled opportunity to expand the frontiers of the intellectual debate around poverty before students who would be the nation's future captains of industry," Thompson said.

The Institute regularly engages the business community through its quarterly CEO Forum on Poverty Series, a first of its kind program in Detroit, which brings together business leaders to discuss real solutions to poverty. □MR

Governor honors Reuss with lifetime achievement award

LTU Trustee Lloyd Reuss, HD'91, was officially recognized in September for many decades of public service when Michigan Gov. Gretchen Whitmer presented him with the George Romney Lifetime Achievement Award. Reuss has long been an active volunteer in the non-profit sector.

The 2019 Governor's Service Awards were presented during a ceremony hosted by the Michigan Community Service Commission in September at the Detroit Opera House.

"Lloyd's story is a testament to his hard work and dedication. He has altered the trajectory of many lives throughout the years and the state of Michigan is forever grateful," Whitmer said.



Lloyd Reuss

A former president of General Motors, Reuss has served as an LTU trustee since 1978 and was chairman of the board from

1993-2014. Reuss' other community and higher education roles have included serving as executive dean of the Center for Advanced Technologies at Focus: HOPE, a nonprofit organization formed in the aftermath of the 1967 Detroit riots to fight racism and poverty by providing education and training for underrepresented minorities. He was active in the program for more than 20 years. During that time his work received recognition from both President Bill Clinton and former U.S. Secretary of State Colin Powell.

Reuss has also been a trustee of Vanderbilt University and the Louisville Theological Seminary, and a member of the Board of Visitors at Duke University's Fuqua School of Business. He was a trustee of the Cranbrook Educational Community, former chairman of the board of the

Cranbrook Institute of Science, and former vice chairman of the Detroit Symphony. In 1995, Reuss received the SAE medal of honor for leadership in technical and educational activities.

As a permanent commemoration of Reuss' leadership at Lawrence Tech, in 2014 the trustees voted to name LTU's third student housing center the Lloyd E. Reuss Residence Hall. They also presented a resolution that said in part: "He has used his business acumen and reservoir of relationships to improve the reputation and recognition of LTU and guide and inspire its Board of Trustees; and through all his actions and service, Dr. Reuss has brought pride and distinction to this University, championed its causes, and strengthened its pursuit of excellence and service to students and humankind..."

DEP and BJA

LTU collaborates on robotic taxis for Detroit auto show

LTU computer science professor C.J. Chung and five students are working on a robotic taxi service for the 2020 North American International Auto Show (NAIAS) in June. They are partnering with Hyundai Mobis, the parts and service arm of the Korean automaker, and the Russian technology company Yandex.

LTU will assist in the development of 10 four-passenger sedans in the largest demonstration to date of Yandex's robotic taxis in the United States. The vehicles will be programmed to take passengers from Detroit's TCF Center to downtown Detroit hotels. There will be a driver to take control if needed.

"We'll be evaluating the ondemand riding service through a mobile app and testing their vehicles, collecting data, and writing a report on the vehicles and the service," Chung said.

Sponsored by Mobis, Chung and his students have been working for more than three years on autonomous vehicle software—code that is now integrated into an autonomous two-passenger electric vehicle that is regularly seen in testing around LTU's Southfield campus.

The Yandex-Mobis-LTU collaboration was one of five corporate mobility challenge projects announced by Gov. Gretchen Whitmer in October. "Mobis is excited for this opportunity to expand our collaboration with LTU, Professor Chung, and his students. The Mobility Challenge is the perfect venue to work together to demonstrate the exceptional capabilities of Yandex's autonomous taxi system in the demanding NAIAS environment," said Doug

MacKenzie, senior manager of Autonomous Vehicle Advanced Engineering at Mobis North America.

"Lawrence Tech has contributed invaluable knowledge to the automotive industry in Michigan for decades," said Preston Carey, senior vice president of International Business Development at Yandex. "We're excited to be working with the team at LTU." \(\sigma EP\)

Lawrence Tech students are working on the software for this self-driving vehicle that will provide a taxi service for the Auto Show in June.



LTU takes second place at Innovation Encounter

Lawrence Tech finished second among seven teams in its 10th annual Innovation Encounter competition, in which students solve real-world engineering and business problems for a corporate client. Eaton Corp. provided this year's business problem.

LTU mechanical engineering

professor Andrew Gerhart presented a four-hour creativityand-innovation workshop.

"This is an outstanding event," said Larry Bennett, director of Vehicle Technologies and Innovation at Eaton. "The students receive training and experience being innovators

on real problems. The sponsor gets a diverse look at potential solutions and a peek at bright and talented students who will be graduating in the coming years. LTU's innovation focus in its engineering curriculum really addresses a need in business today."

"What started out as an idea has now become an event that is recognized nationally as a truly unique learning experience for students," said LTU Professor Don Reimer, the founder of Innovation Encounter.

For more information on becoming a sponsor of a future Innovation Encounter, contact Ross Sanders at rsanders1@ltu. edu or 248.204.2221. \(\square\) MR

Participants in Innovation Encounter gather outside LTU's Taubman Complex.



National study confirms high value of a Lawrence Tech degree

A new national study of the value of a college education placed Lawrence Technological University fourth in Michigan and in the top 7 percent nationally of 4,500 colleges surveyed by the U.S. Department of Education for its 2019 College Scorecard.

The government data was analyzed by Georgetown

University's Center on Education and the Workforce. Using a complex calculation of net present value of a college degree, a Lawrence Tech graduate can expect a net-present-value return of \$1,124,000 over 40 years on the investment in a college degree. That places the University fourth among Michigan colleges, just ahead

of Michigan State University. It ranks first in the three-county Metro Detroit area.

The study ranked private universities ahead of public universities nationwide in the career-long value of a degree. Three of the top 10 colleges were specialty pharmacy schools in New York, Missouri, and Massachusetts. Two others were

maritime academies in Maine and New York.

emphasize Lawrence Tech's commitment to preparing its graduates for productive careers," LTU President Virinder Moudgil said. "Our graduates are ready to hit the ground running in their first job and usually that will result in greater earning power in the years to come. A Lawrence Tech degree gives our graduates a head start on their peers at most other universities."

EP

LTU students get a head start with new loaded laptops

Twenty years ago, Lawrence Tech became one of the first colleges in the country to provide students with high-performing computers preloaded with the software programs they needed for their courses. The hardware and software are covered by tuition for all undergraduate and Master of Architecture students through the University's LTuZone program.

"LTU doesn't have traditional computer labs like most universities since the students have everything they need to design a car or a building in their backpack," said Tim Chavis, the chief information officer at Lawrence Tech.

At the start of this academic year, students in LTU's College of Business and Information Technology and most majors in the College of Arts and Sciences received new Fujitsu T938 Lifebook laptops, which offer 16 GB of RAM, a 512-GB solid-state hard drive, and an HD 13.3-inch display. The computers retail for about \$1,800.

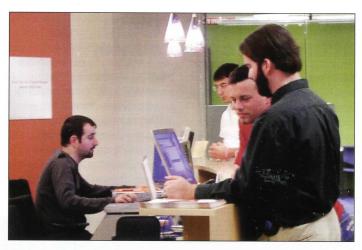
Students in most programs in the College of Engineering received these computers a year ago.

Students in the College of Architecture and Design received new HP X360 ZBook laptops, which offer 16 GB of RAM, a 512-GB hard drive, a 15.6-inch 4G display with nearly 8.3 million pixels, and a touch screen with more than 4,000 pressure points for precision drawing. These computers retail for about \$2,000.

Students in the College of Arts and Sciences media communication program, the College of Architecture's graphic design program, and the College of Engineering's audio engineering technology program received Apple MacBook Pro laptops

with 16 GB of RAM, a 512-GB hard drive, and a 15-inch Retina display with about 5.2 million pixels. These computers retail for about \$2,400.

The laptops also come fully loaded with professional-grade software identical to what the students can expect to use in their future workplaces—software that would cost up to \$100,000 for an individual to buy without a student or employer discount. $\square MR$



LTU students receive and check in their laptops at the Help Desk in the Taubman Student Services Center.

LTU students experience the real world of software engineering

In October, 10 Lawrence Tech students experienced the challenges of software engineering at the Altimetrik Collider, a hub for software engineers in the burgeoning tech corridor along Woodward Avenue in downtown Detroit.

Altimetrik Collider's first workshop for college students was aimed at students interested in becoming software engineers in mobile technology, application program-

ming interface (API) technology, and web development.

During the one-day program held in the Wright Kay Building, student teams were given a business problem to work on in the morning. They received feedback from professionals in the field after presenting a progress report in the afternoon. In the process they gained a better understanding of what it takes to succeed in software engineering, according to Ross Sanders, LTU's manager of cor-



porate partnerships.

Perhaps just as important was the contact they gained with the software ecosystem in Detroit. "Exposing them to the software engineering community in the city is important," Sanders said.

Based in Southfield, Altimetrik Corp. designs and develops application software for product and platform engineering, cloud, visualization, analytics, and talent assessment solutions. Altimetrik serves clients worldwide. Lawrence Tech students tackle a business problem at the Altimetrik Collider's first workshop for college students

The Altimetrik Collider was established in downtown Detroit to bring together software engineers to collaborate on developing software solutions through open workshop sessions and regular events such as meetups, presentations by speakers, and "hackathons." $\square MR$

Crain's Detroit Business salutes Walters for educational leadership

Filza Walters, MBA'98, professor of architectural engineering, was recognized as one of Crain's Detroit Business' 2019 Notable Women in Education Leadership.

Walters, founding director of LTU's five-year combined bachelor's and master's degree program in architectural engineering, was credited for boosting the enrollment of women at LTU through the program.

"The program is the first of its kind in Michigan and the second integrated degree accredited

program in the world. The program boasts a balanced ratio of women and men, which is uncommon for engineering disciplines, and graduates have enjoyed a 100 percent placement rate within three months of graduation," the Detroit business publication wrote.

Walters was also credited for working with the Office of Admissions to build dual-enrollment programs for high school students. □MR



Professor Filza Walters (center) works with students in LTU's Lighting Lab.

LTU takes second place in its Grand Prix



finished second among nine participating schools in the 11th annual Grand Prix in October hosted by LTU's Blue Devil Motorsports student racing organization. The Formula SAE cars are half-scale Indy-style open-wheel racing cars that weigh between 400 and 500 pounds empty. Hundreds of spectators and students lined the twisting track in front of LTU's Science Building to watch the time trials. LTU and eight other colleges and universities participated in the event.

Two business leaders named as Lawrence Tech trustees

Two business leaders have been named to LTU's Board of Trustees: Jeff Lemmer, BSMCS'87, vice president and chief information officer, Ford Motor Company; and David Nicholson, president and chief executive officer of PVS Chemicals, Inc.

LTU trustees establish strategic direction, help formulate and approve major institutional policies, and hire the University's executive team. They serve without compensation.

At Ford, Lemmer is responsible for information technology services for the company's operations globally and oversees Ford's global IT business applications, architecture, data centers, engineering and infrastructure services. He earned a Bachelor of Science degree from Lawrence Tech in math and computer science.

Lemmer joined Ford in 1987 and has spent his entire career in

IT with the company, serving in a number of leadership positions at both Ford Motor Company and at Ford Credit. He was most recently Ford's vice president and chief operating officer of information technology, where he led the development of automotive-related applications and ran day-to-day operations. In this role, he oversaw the design and construction of two new data centers and the transformation of the IT organization to a product-driven organization, reflecting the best practice of worldclass software companies.

As president and chief executive officer of PVS Chemicals, Inc., Nicholson oversees the international manufacturer, distributor and marketer of chemicals headquartered in Detroit. Before joining PVS, his career included working as a commercial banker with LaSalle Bank, finance manager for E&J



Jeff Lemmer

Gallo Winery, and as an associate with Ryan Enterprises, a Chicago private equity firm.

In 2013, Nicholson was appointed to the Wayne State University Board of Governors, where he served until November 2018. He also serves on the boards of Kids Kicking Cancer, Graycor, Inc., and Legacy DMC, and is a trustee of the University Liggett Schools.

Nicholson graduated with a BA in political science from the University of Wisconsin-Madison



David Nicholson

and earned an MBA from the University of Chicago Graduate School of Business.

"Mr. Lemmer and Mr. Nicholson bring very strong credentials to our Board of Trustees as accomplished business executives and represent fields where we have a number of successful alumni," said Virinder K. Moudgil, Lawrence Tech's president and CEO. "We are delighted to have them join our board."

"BJA"

Tech Transit sets another ridership record

Tech Transit has increased annual ridership four-fold to more than 15,000 since its inception in the 2012-13 academic year. Most routes are to popular destinations in Southfield. Students also catch rides around campus and to LTU's Detroit Center for Design + Technology on Woodward Avenue in Midtown Detroit. LTU's Tech Transit team includes (left to right) coordinator Eric Green, Naun Collado, Sagar Shah, and Zach Villanueva.



Successful lobbyists in Lansing

In December this group of Lawrence Tech students and administrations journeved with LTU President Virinder Moudail to the State Capitol in Lansing to draw attention to the hardship created when a state budget impasse put the state's needs-based education grant program in limbo. More than 500 LTU students were counting on grants that had already been awarded. LTU's lobbying effort on behalf of the Michigan Independent Colleges and Universities appeared to pay off the same day when the State Legislature approved a reinstatement of the grant program as part of budget negotiations with Gov. Gretchen Whitmer. See related story on page 1.



Classroom named after math professor



In August, LTU President Virinder Moudgil (left) and College of Arts and Sciences Associate Dean Glen Bauer participated in a ceremony dedicating a Science Building classroom to Professor Emerita Sonia Henckel. She taught mathematics for almost 50 years after joining the faculty in the mid-1960s. Success in her classes was considered a key rite of passage for several generations of engineers and architects. She retired at the end of 2013.



Capacity attendance at the Young Woman's Leadership Conference

A capacity audience of 350 students and teachers built their skills toward tomorrow's careers at the third annual Lawrence Technological University Young Women's Leadership Conference Nov. 1. Keynote speaker for the event was Laura Jones, global talent director for General Motors, followed by a panel discussion on leadership development moderated by Patty Castelli, LTU associate professor of business.

Giving Back

Stampor's major gift inspired by Marburger's words

LTU's Jubilee Brunch often moves alumni to fondly reminisce about their college days.

For John Stampor, BSME'61, attending Jubilee Brunch encouraged a bit more than that—namely, a \$1 million unrestricted cash gift to benefit Lawrence Tech students.

Stampor has rarely missed the annual Jubilee Brunch, which gathers and recognizes graduates of 50 or more years ago. He said he was moved to make a gift after he heard an inspiring speech made at the brunch by President Emeritus Richard Marburger. Focusing on LTU's mantra of theory and practice, Marburger adamantly praised the Jubilarians in attendance, saying they helped set the stage for the great success current students and recent alumni are

experiencing in the classroom and in the workforce. This motivated Stampor to action.

A man of few words, Stampor had a straightforward reason for making the gift: "Lawrence Tech needed the funds, and I had it, so why not?" he said. "I'm glad I made the gift."

And quite the gift it is— one of the University's largest individual gifts ever!

"This gift will have a long and far-reaching impact on the lives of LTU students," President Virinder Moudgil said. "We are gratified to see such a wonderful expression of John's commitment to his alma mater."

After graduating from Lawrence Tech, Stampor worked for the city of Detroit water and sewer department. But it was his hobby tinkering in the



Lawrence Tech alumnus John Stampor greets Tyler Kulka of the LTU football team at the Jubilee Brunch during Homecoming in October.

stock market where Stampor really made his mark. Early investments in tech giants such as Burroughs, Google and Facebook led to Stampor's success in his second career as a serious investor.

Stampor said his time at

Lawrence Tech "helped very much" in his assessment of potential investments. "My Lawrence Tech education helped me, I'm certain of that," Stampor said. "I owe a lot to Lawrence Tech, and I'm very glad I came here."

MR

Graduating seniors give back

The Senior Class Gift is an opportunity for new graduates to make an impact and leave a legacy at Lawrence Tech. Led by the Student Philanthropy Council

(SPC), a group of student volunteers who raise awareness of and appreciation for philanthropic support



on campus, the Senior Class Gift provides an opportunity for new graduates to support current and future Blue Devils.

Established in 2018, the 2018-19 senior class gift raised more than \$2,400 for the Student

SENIOR class gift

Emergency Fund. This year's class gift will provide flexible funding to address the most immediate needs on campus

and take advantage of emerging opportunities by supporting the LTU Annual Fund.

Are you a new graduate who would like to make a difference to future generations of Blue Devils? Help provide them with

Encourage a Legacy!

Wouldn't your son, daughter, niece, nephew, or grandchild benefit, like you did, from a Lawrence Tech education?
LTU graduates go far, achieve much, and earn some of the highest salaries of any college alumni in America. Teaching, facilities, and campus life have never been better!

Encourage the young people in your life to explore LTU! Visit www.ltu.edu or phone 248.204.3160.

Architecture and Design | Arts and Sciences | Business and Information Technology | Engineering



Celebrating 50 years as LTU grads



Jubilee Society members are recognized at halftime of the Homecoming football game on October 19, 2019. Reunion Chair Ron Muccioli, BSIM'69, is joined with fellow alumni: Gary Lowell, BSME'69; Dana Markey, BSME'69; Bruno Temporelli, BSCvE'59; and James Vehoski, BSME'64, BSIM'69. This years Jubilee class raised \$30,000 to support student scholorships.

Homecoming reaches new heights

The new home stands at Blue Devils Stadium provided an added dimension to Homecoming on Oct. 19, 2019. The annual Jubilee Brunch honored alumni of 50 or more years ago in the University Technology and Learning Center Gallery, while hundreds enjoyed tailgating in the parking lot before the noon kickoff of LTU's football game. Afternoon and evening games of the women's and men's soccer teams rounded out the busy Homecoming schedule.

Mark your calendars for Homecoming 2020 on Saturday, Oct. 3.



A flawless fall day greeted hundreds of Blue Devils fans for the 2019 Homecoming contest.



Class of 69

Front Row: Robert Thomas, AIST'69, BSIM'73; Dana Markey, BSME'69; Ronald Muccioli, BSIM'69; Bernard "Skip" Wendt, BSIM'69; Salvatore "Sam" Bonanno, BSME'69

Back Row: Richard Smith, BSAr'69; William Mathisen, AMT'69; Richard Kakkuri, BSME'69; J. Michael George, BSIM'69; James Vehoski, BSME'64, BSIM'69; Gary Lowell, BSME'69; Jeffery VanDorn, BSEE'69; John Lambert, Jr., BSIM'69; Charles Northrup, BSCvE'69

Classes of 1950-59



Front Row: William Hunley, BSEE'55; Richard Nicholas, BSME'50; Glenn Noble, BSCvE'59

Back Row: Bruno Temporelli, BSCvE'59; Walter McCoskey, BSME'51; Laurence Biehl, BSIM'58; James Wheeler, BSIM'59; Charles Knight, BSIM'59; Hayward "Tony" York, BSIM'59

Classes of 1960-1968

Front Row: Alexander Koleba, BSME'64; Ronald Kurkowski, BSIM'63; John Stampor, BSME'61; Wayne Kunze, BSIM'67; Donna Snowden, BA'66 DIT; Stephen Roback, BSHu'65 DIT

Back Row: Roger Shtogrin, BSIM'61; Roger Avie, BSIM'68; Albert Flamme, BSEE'63; Roger Wagner, BSME'66; Don Reimer, BSIM'62; John Honkala, BSME'68, MSEE'73



A fast start in industry prompts Lang to give back

Pete Lang, BSME'78, enjoyed a varied and successful career in the energy sector that spanned 40 years. It all began with a sound educational foundation and good advice from the faculty at Lawrence Tech. As a result, he and his wife decided that it is important to give back.

They have started with the Peter J. and Ada F. Lang Endowed Scholarship and expect to continue to support the University in the years to come.

Lang paid his own tuition by working throughout his college years, but he and his wife are keenly aware that has become harder to do with the higher cost of a college education. Students often have to take on a heavy debt load even when they work part-time like he did. "We decided to give something to the school and help prospective engineers," Lang said.

While growing up in nearby Berkley, Lang wanted to follow in his father's footsteps as an engineer, but he didn't decide to attend Lawrence Tech until his high school physics teacher suggested he attend the University's six-week Summer Science Institute. That was where he met the first of several Lawrence Tech mentors, Zaven Margosian, who was dean of the College of Arts and Sciences.

Another mentor was Stephen Davis, dean of the College of Engineering and chairman of the Department of Mechanical Engineering. Lang also received guidance from Richard Lundstrom, faculty adviser to LTU's student SAE chapter that was one of the largest in the country.

"The faculty was very approachable," Lang said. "Smallclassroom comradery and access to professors with their realworld experience in industry was inspiring and helpful to me as a student engineer."

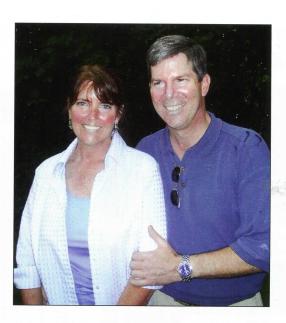
Davis gave Lang the opportunity to be the University's first co-op student at Masco's Delta faucet seal compounding lab. Lang convinced Masco to let him develop a test fixture for evaluating various seal compounds, which he developed as his senior project that received the alumni award for engineering at LTU's spring open house in 1978. In addition, Lang was a finalist in the 1977-78 Design Engineering Student Contest, a prestigious national competition sponsored by the American Society of Mechanical Engineers.

Even though there were several nationally recognized engineering schools in Texas, Davis convinced Houston-based Cameron Iron Works, a major supplier to the oil and gas industry, to interview Lawrence Tech students. Lang asked Davis what he thought of the opportunities for him between Cameron and Ford Motor Company.

"Dr. Davis said Cameron hands-down, and he turned out to be right," Lang said.

In 1997 Lang was named president of a Cameron's choke valve division based in Ireland. Seven years later, he was given additional responsibility for the Subsea Controls division based in Germany, and continued to lead both divisions for nearly two years.

Next he served as vice president of Project Execution for Cameron's Subsea System division and later finished up as vice president of Aftermarket Services for their Drilling System division. Lang spent a total of 26 years with Cameron and the last five years working part-time on the board of directors of a private equity company. □EP



Pete and Ada Lang

Student Caller Spotlight

Andrea Smith seized her opportunity to pursue her passion in nursing, earning a second degree, after a 21-year career in business. She has seen first hand the impact of amazing nurses. Andrea's son, Aiden, was born prematurely at 28 weeks and is multiply disabled. He spent seven months in the hospital after his birth. "I would have been lost without our amazing NICU nurses," she said. Experiencing the impact the nurses made, Andrea realized she wanted to do for other families what they did for hers.

Andrea came to Lawrence Tech in 2018 when Aiden was matched with the men's soccer team, through Team IMPACT. After coming to campus, meeting the students and learning that LTU had a new nursing program, she knew this was it. As a non-traditional student, she was nervous, but the University community welcomed her with open arms.

Admittedly, it has been a lot to balance, especially when it came to affording tuition,



Andrea Smith, BSN'23

but the donor scholarship she received helped bridge the gap. When Andrea was awarded the scholarship, she was so happy that it brought tears to her eyes. This gift not only made a difference to Andrea but also to her family, that she is working hard to support.

Your gift can and does make an impact! To support future students, contact Peggy English, University Advancement, at menglish@ltu.edu or 248.204.2300.

□ RL

Engineering academy for girls coming to Lawrence Tech

Lawrence Technological University will join The Engineering Society of Detroit (ESD) in hosting ESD's Girls in Engineering Academy (GEA) for the coming year.

The 2020 GEA program has been made possible by generous support from The Holley Foundation and PNC Bank.

"We think this is important because encouraging women in engineering is important," said the Rev. George M. Holley, program chairman at The Holley Foundation. "We are delighted to be able to partner with Lawrence Tech, and The Engineering Society of Detroit as well. We've had some great programs and partnerships with the University over the years."

Holley's grandfather, an automotive engineer who cofounded Holley Carburetors, established the Holley Foundation in 1944. "My grandfather's goal was to help young men and women get an education by giving scholarships to men and women on the shop floor at Holley Carburetors," Holley said. "The Girls in Engineering Academy is a logical extension of that work," he added.

The Holley Foundation has been a longtime supporter of LTU in a variety of programs, including the annual Walker L. Cisler Memorial Lecture Series.

Ric DeVore, PNC regional president for Detroit and Southeast Michigan, added: "As a Main Street bank, PNC is committed to supporting valuable educational experiences for children of all ages. This exciting program offers significant STEM educational activities that will spark interest in careers in engineering and technology."

The Girls in Engineering Academy is designed to improve academic achievement and

increase interest in engineering among girls. ESD's overall goal for this program is to decrease the gender disparity in engineering professions by helping girls to excel at STEM subjects and eventually to go on to pursue engineering careers. According to Robert Magee, ESD executive director: "GEA's key objective is designed to ameliorate the gender and achievement gaps by introducing STEM concepts at an early age—middle school. We believe that an early exposure to STEM programs like GEA will help girls understand the importance of STEM careers, but also prepare them academically for high school."

Under the GEA program, 30 middle-school girls will be selected by ESD to attend a four-week summer session running from July 6 to July 31, on the LTU campus in Southfield. The program will provide math and science enrichment classes; English and language arts education; hands-on project-based STEM (science, technology, engineering and math) activities; life skills development; mentoring; pre-college experiences; and engineering career exploration.

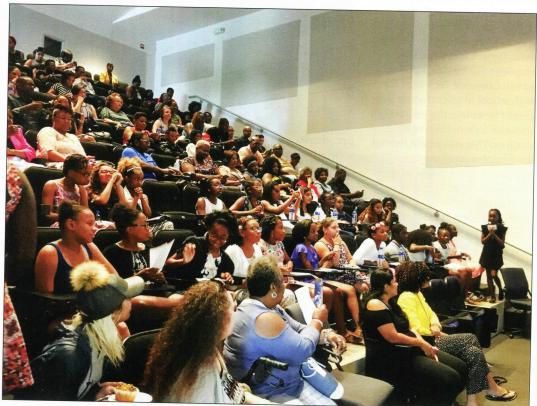
The GEA program will present academic subjects to the students, as much as possible, from a female's perspective. Each component of the program has been designed, with input from women engineering faculty, undergraduate and graduate students from Detroit-area universities, to capture the interest of and to further motivate these young women in the direction of selecting an engineering major for a career choice after high school graduation. Classes will be taught by female undergraduate and graduate engineering and STEM majors.

The GEA program, now entering its fourth year, will continue during the 2020-21 academic

year, administered through LTU's Marburger STEM Center. The selected students will meet two Saturdays per month for three-hour sessions. Students will continue to learn about various engineering disciplines and careers, while at the same time strengthening their academic skills. Students will also focus on STEM activities to reinforce concepts learned over the summer and during the school year.

"This partnership will enable our GEA scholars to experience the rich history of LTU and the innovative technology of its College of Engineering," said Gerald Thompkins, program manager at ESD. "Every effort will be made to provide the GEA students with a realistic view of the challenges, benefits and excitement of an engineering education." \(\sigma EP\) and \(MR\)

The closing ceremony of an earlier cohort of the Engineering Society of Detroit's Girls in Engineering Academy.



Detroit Edison Boat Club Social

Alumni prepare to set sail at the Detroit Edison Boat Club July 29. A special thank you to Gerald Polk, BSEE'93 who hosted this memorable evening! This was one of the final events held at the Detroit Edison Boat Club, which formally closed at the end of the 2019 season.



Detroit Tigers Alumni Social

While the Tigers couldn't put together a win, Lawrence Tech alumni and friends enjoyed a beautiful night downtown at Comerica Park on September 20, 2019.

Pedal Bar Social

The Class of 2019 was welcomed to the alumni family at the June 6, 2019 Pedal Bar Social in downtown Detroit. Alumni and friends visited several iconic locations while enjoying a beautiful evening riding around the city.



Dream Cruise

David Campbell, BSIM'74, poses with his 1957 Thunderbird at the annual Dream Cruise event in Pontiac on August 15, 2019. Special thanks to David Darbyshire, BSME'87, and Richard Darbyshire, BSME'94, for hosting this annual event.

Tech Invitational raises thousands for scholarships

The air was hot and humid and the skies hazy for the 16th Annual Tech Invitational golf outing, Aug. 12 at the Meadowbrook Country Club in Northville. But at least the showers held off until the day's end.

More than 100 golfers participated in the event at the historic golf course, which dates back to 1916. Through their generosity, attendees raised more than \$60,000 in support of LTU

students, while having a heck of a lot of fun.

Mark your calendar now for the 2020 Tech Invitational, Monday, Aug. 17, at Meadowbrook Country Club. Visit www. ltu.edu/techinvitational for more information. □*MR*

Dozens of golf balls roll toward a single cup in the closest-to-the-hole putting contest that traditionally kicks off the Tech Invitational.

A glorious buffet dinner spread greeted the golfers after finishing their round.





Two members of the winning team from the City of Southfield are joined by Tech Invitational chair Jason Hoffmeyer of TCF Bank, right, to show off their hardware and a handsome boxed set of golf balls.

LTU President Virinder Moudgil thanks participating golfers and sponsors for their generosity in supporting LTU students.

Name your seat at Blue Devils Stadium!



You can have the best seat in the house, with your name on it! Individuals or corporations have the opportunity to name a seat or section of seats for the entire 2020 to 2021 athletic season. VIP seating offers a new way to experience LTU athletics, along with the VIP hospitality at LTU home football games.

All naming comes with personalized recognition on the seats. It is a great way to help realize the goal of providing a state of the art athletic facility. Blue Devils Stadium is the home of five LTU athletic teams, men's and women's soccer, men's and women's lacrosse, and football.

It also serves as the homefield for several community partners. Fans enjoy an exciting football game at Blue Devils Stadium

Show your Blue Devils pride, or honor someone important to you, by naming a seat at Blue Devils Stadium.

Name A Seat Today!

Naming opportunities are limited to 60 seats and pricing options are \$500, \$750, and \$1,000, depending on location. For more information, contact Jay Redman at 248.204.2317, or jredman@ ltu.edu.

Master's degrees and graduate certificates Architecture and Design | Arts and Sciences Business and Information Technology | Engineering Learn More Itu.edu/gradprograms | Itu.edu/applyfree Lawrence Technological University SOUTHFIELD, MICHIGAN Possible is everything.

Upcoming Alumni Events



LTU Night with the Red Wings

Sunday, Feb. 23 | Little Caesars Arena 2645 Woodward Ave., Detroit, MI 48201



Florida Regional Events

Naples Area Alumni & Friends Reception
Hosted by Mario, BSME'67, and Elaine Moscone
Thursday, March 12 | 5:30-7 p.m.

Hamilton Harbor Yacht Club, 7065 Hamilton Ave. Naples, FL 34112



St. Petersburg Alumni & Friends Reception

Hosted by Ken, BSME'78, and Margaret Grezlik Saturday, March 14 | 11:30 a.m.-1 p.m. Vinoy Renaissance Resort, 501 5th Ave. NE St. Petersburg, FL 33701



Detroit Tigers vs. Toronto Blue Jays Joker Marchant Stadium

Sunday, March 15 | 11:30 a.m. pregame reception, 1:05 p.m. game time 2301 Lakeland Hills Boulevard, Lakeland, FL 33805



John G. Petty Community Champion Award Presentation

Sunday, Feb. 9 | 2 p.m. | University Technology and Learning Center Gallery (T210)



Walker L. Cisler Memorial Lecture Series

Tuesday, March 24 | 7 p.m. | Mary E. Marburger Science and Engineering Auditorium (S100)



Annual Spring Open House

Sunday, March 29 | Buell Building | 11 a.m.



LTU Research Day

Friday, April 3 | Architecture Building Auditorium and Gallery | 8:30 a.m.



Blue Devil Motorsports Unveiling

Tuesday, April 7 | noon | Buell Building



Spring Commencement

Saturday, May 9 | Don Ridler Field House



Oakland County Alumni & Friends Reception

May 2020, date TBA | Skyline Club 2000 Town Center, Southfield, MI 48075



17th Annual Tech Invitational Golf Outing

10 a.m. tee-off Meadowbrook Country Club 40941 Eight Mile Road, Northville, MI 48167



LTU Homecoming

Learn more about all of Lawrence Tech's upcoming events at ltu.edu/alumni or contact Jay Redman, acting director of alumni relations, 248.204.2317 for more information.

Alumni Notes

Alumni Notes includes news gathered from alumni, their families and friends, and media reports. Submissions received after the deadline will be published in the Summer/Fall 2020 issue. To submit an update, please visit ltu.edu/alumni, email alumni@ltu.edu or use the form in this section.

Arthur W. Van Bruggen,

BSIM'73, celebrated retirement from the CPA firm he founded in 1977. Arthur launched Van Bruggen & Vande Vegte in Boyden, lowa, and retired on April 15.



Dennis J. Kaiser, BSBA'79, was promoted to captain of United Airlines' B-787/10 Dreamliner, based in New

York City. Dennis has been with United Airlines for 32 years.

Clark A. Beach, BSAr'83, has been promoted to senior IT infrastructure manager at MSU Federal Credit Union.



Mark G. Nickita, BSAr'87, BAr'89, MAr'01, FAIA, won the 2019 Charles Blessing Award for his leadership in planning

and civic issues. The award was named for the visionary Detroit city planner, architect, engineer, and educator. Mark is a past LTU Distinguished Architecture Alumni Award winner and an adjunct faculty member in the College of Architecture and Design. A former mayor of Birmingham, in 1991 he co-founded Archive DS, a multi-disciplinary design firm in Detroit.



Kirk T. Steudle, BSCE'87, PE, joined traffic management solutions company Econolite after retiring as director of the

Michigan Department of Transportation in October 2018. Kirk is senior vice president, overseeing Econolite's transportation systems group and its subsidiary CAVita. He spent 31 years working at MDOT and 13 years as its director. Kirk was named to LTU's College of Engineering Hall of Fame in 2012.



Lawrence R. Sutton, BSTe'88, has joined Coldwater Machine Company in Coldwater, Ohio, as regional account manager

for Michigan and Canada. Larry has been an account manager to OEM and Tier 1 automotive suppliers for more than 25 years. Most recently he was business development manager for IPR Robotics.

Tricia Alwin, BSCvE'95, is the new city manager and public works director in Menominee, Mich. Tricia previously was employed at Marinette Marine where she worked on an Alaskan research vessel, among other projects.

Angela Polk, BSHu'95, was named one of two Board Presidents of the Year for 2017-18 by the Eastern Michigan University Charter Schools Office. Angela is board president of Hope Academy in Detroit.



Tricia Beck, BSAr'96, MAr'97, was named one of 2019's Notable Women in STEM by Crain's Detroit Business magazine.



Pamela J.
Danckaert,
BSAr'98, AIA,
LEED AP, has
been chosen as
the first executive director of
the American

Institute of Architects' Grand Rapids chapter.



Filza Walters, MBA'98, was named one of 2019's Notable Women in Education Leadership by Crain's Detroit Business

magazine. Filza is the founding director of LTU's combined, five-year, bachelor's and master's degree program in architectural engineering. The program is the first of its kind in Michigan and the second integrated accredited degree program in the world.



Suzanne Lindsay-Walker, BSCvE'01, has been named chief sustainability officer (CSO) and vice president of

environmental affairs at UPS. As part of her mission, Suzanne will oversee UPS's sustainability goals to reduce the use of carbonbased fuels.



Ron Rader, Jr., BSAr'02, has been named lead designer at TDG Architects in Pontiac. Ron has 30 years of experience,

including 20 years at General Motors, as a project lead.



Amy M. Baker, BSAr'03, MAr'06, RA, LEED AP, CST, CDT, SCIP, was elected to the Air Barrier Association of America's

board of directors. In 2018, Amy formed her own architecture and specification consulting firm, Amy Baker Architect.

Jack Morris, PE, BSCvE'03, has joined Morris-Depew Associates as an engineering project manager in the company's Fort Meyers, Fla. headquarters.



Jerry Scott
Knoy, CIMBA'04,
was named
president of German Machine
Tools of America
(GMTA). Scott
joined GMTA

in 2005. The Ann Arbor-based company supplies machine tools, laser welding systems, and parts washers throughout North America.



Tiffany D. Brown, BSAr'05, MAr'07, MBA'15, AAIA, NOMA, was presented the Associate Member Award at the 2019 AIA

Michigan Honor Awards. Tiffany is an LTU adjunct faculty member, and the inaugural winner of Lawrence Tech's John G. Petty Community Champion Award.



Kate Chapman, BIA'06, MBA, IIDA, NCIDQ, CHID, LEED, AP, WELL AP, EDAC, has been appointed managing director

of Blitz design firm's new Denver studio. Kate also serves as president-elect of the International Interior Design Association (IIDA) Rocky Mountain Chapter.



Jonathan M. Jackson, BSAr'10, UCertBIM'11, MAr'12, AIA, was presented the Young Architect Award at

the 2019 AIA Michigan Honor Awards.



Edward Nakhle, BSAr'10, MAr'12, has joined the Detroit office of the architecture and design firm Quinn Evans. Edward is a

senior designer at the Washington, DC-based firm. Among its projects, Quinn Evans is restoring the Michigan Central Station in Detroit.

Josh P. Welfle, MAr'11, has joined Feick Design Group in Sandusky, Ohio, as a project architect.



For the latest on LTU sports, visit www.ltuathletics.com

Erin K. Curley, MAr'12, AIA, has opened her own firm, Engage Studio Architects, LLC, and was named one of Toledo, Ohio's "20 Under 40" by Leadership Toledo, Inc.



Gary T. Schaub, BSAr'13, has joined Cornwell Architects in Traverse City as an associate.



Angèle
Dmytruk,
MAr'14, was
named Woman
of the Month
for April 2019
by the Business
and Professional

Women's Club of Greater Sudbury in Ontario, Canada.

Lihua Dishman, DBA'16, was promoted to associate professor at A.T. Still University of Health Sciences. Lihua develops and teaches online courses in the Master of Health Administration and Doctor of Health Administration programs in the College of Graduate Health Studies at A.T. Still, which has campuses in Missouri and Arizona. Recently, she published a case study with SAGE Business Cases.



Rachel N. Sweet, BSMC'17, has joined Lansing's WILX News 10 team as a producer and multimedia journalist.

News for Alumni Notes

Complete this form and tell us about yourself or your fellow Lawrence Tech or DIT alums. Mail to the Office of Alumni Relations, or email alumni@ltu.edu. Tell us about honors, promotions, marriages, appointments, and other activities.

■ New Address?

Name

Street

City State ZIP

Home Phone (

Email

Use the email address above or mail to: Lawrence Technological University, Office of Alumni Relations 21000 West Ten Mile Road, Southfield, MI 48075-1058 Fax: 248.204.2207

FRIENDS WE'LL

Information for this section is gathered from family and friends of deceased alumni and friends of LTU, and newspapers or electronic media accounts. When providing an obituary, please furnish information that includes the date of death, and any Lawrence Tech or DIT connected survivors and their graduation dates. If sending a newspaper clipping, please include the date and source. To submit a notice, please visit ltu.edu/ alumni, email alumni@ltu. edu or mail to LTU Office of Alumni Relations, 21000 W. Ten Mile Rd., Southfield, MI 48075-1058

Leonard W. Robinson, BChE'43, of Trenton, Dec. 18, 2016.

Robert A. Saccaro, BSME'44, PE, of Troy, Nov. 16, 2018. Mr. Saccaro was an Army combat engineer in World War II, and an engineer with Ford Motor Company.

James F. Carey, BSME'48, of Greensboro, NC, Nov. 6, 2016. Mr. Carey served in the military during World War II and earned two Purple Hearts from fighting in the Battle of the Bulge. He worked many years at Detroit Edison, working on a number of important projects including two of the company's nuclear power plants. Mr. Carey was an avid and decorated sailboat racer, as well as a devoted civic leader in Troy, Mich. In 1960, Lawrence Tech recognized him with the Alumni Achievement Award. He is survived by his wife, Inez, and five children.

Robert V. Collins, BSME'50, of Ann Arbor, March 30, 2019. Mr. Collins was a torpedo operator on the USS Edwards, a Navy destroyer that earned 14 battle stars during World War II. He then began a 36-year career

as a mechanical engineer with Detroit Edison. He is survived by four children.

Paul F. Johnson, BSArE'50, of Plymouth, Feb. 19, 2019. Mr. Johnson served in the Navy during World War II and in the Army during the Korean conflict. His career was as an architectural engineer for DTE and Ford Motor Co. He is survived by his wife, Sheila, and two children.

George J. Kermizian, BSIE'50, of Chesterfield, Jan. 31, 2019. Mr. Kermizian was a veteran of the Army Air Corps and served during World War II.

Robert E. Pangburn, BSCvE'50, of Ocala, Fla., June 25, 2018. Mr. Pangburn is survived by three children.

Kenneth R. West, BSME'50, of Canton, Nov. 8, 2018. Mr. West was a Navy veteran of World War II. He worked in the automotive spring manufacturing business, including starting and running his own company. He is survived by six children.

Sam Lovalenti, BSEE'51, of Toledo, Ohio, March 7, 2019. Mr. Lovalenti was a Navy veteran whose service included an Atlantic tour. His first civilian job, with General Motors Research, was on the team that developed the first continuously variable electronic transmission. After a career that included various military defense contractors, IBM, Prestolite Electric, and Owens Illinois, Mr. Lovalenti taught electronics and electrical engineering for 15 years. He is survived by his wife, Anna, and three children.

Karl H. Schwarze, BSME'51, of Troy, June 14, 2018. Mr. Schwarze started working for Chrysler at age 16 when he joined the die apprentice program, and stayed with the company for more than 44 years. Among the projects in

which he was involved was the Structures Engineering Design group, Chrysler's first electric car (the ETVI), and the first minivan. Mr. Schwarze is survived by his wife, Alvira, and three children.

James B. Hall, APTDT'54, of Royal Oak, Nov. 18, 2018. Mr. Jones served in the Navy during World War II.

Edward J. Kovach, BSArE'54, of New York, NY, Jan. 9, 2018. He served in the military during the Korean War and was stationed in Germany. He then became an award-winning architect and worked on such projects as the Metropolitan Museum of Art, Dulles and JFK airports, the St. Louis Arch, Lincoln Center, the CBS building, and the Princeton Athletic Center. Mr. Kovach was a Michigan Hall of Fame athlete in track and field for the long jump, as well as a member of LTU's 1953 basketball team. He is survived by three children.

Richard E. Zander, BSArE'55, of Westerville, Ohio, Sept. 28, 2018. Mr. Zander retired from General Dynamics Plant Engineering, after previously working more than 27 years for Chrysler. He is survived by a son.

Garry W. Klees, BSME'59, of Mercer Island, Wash., Sept. 13, 2018. Mr. Klees was a propulsion engineer at Boeing until he retired in 1992. He is survived by two children.

Robert M. Evancho, AMT'56, of Shelby Township, July 29, 2018. Mr. Evancho is survived by his wife, Sally, and four children.

Lawrence E. Kiselis, BSME'56, of West Bloomfield, May 18, 2019. Mr. Kiselis served in the Navy, and was an engineer at Ford Motor Co. for 35 years. He is survived by his wife, Marion, and two children.

Robert V. Peller, BSME'56, BSIE'57, BBA'60 (DIT) of Harrison Township, June 11, 2016. Mr. Peller had a successful career as an engineer in the aerospace and auto industries. He is survived by his wife, Gayle, and two children.

Charles A. Danowski, BSArE'57, of Wyandotte, May 23, 2017. Mr. Danowski was an architect at several major firms in the Detroit area, and at Ford Motor Co. before starting his own architectural business in 1973. He is survived by his wife, Jane, and two children.

Ralph P. Rochon, ARACT'57, of Canton, March 21, 2018. Mr. Rochon was a Navy Reservist, 1953-61. After working as chief facilities engineer at several locations including Annapolis Hospital, Detroit Edison, Chrysler, and Blue Cross, Mr. Rochon started his own business, RR Refrigeration, Inc. and Furnace Works; he retired in 2009. He is survived by his wife, Corinne, and two children.

David Isaac Leash, BSArE'58, of San Francisco, Calif., April 20, 2014. Mr. Leash is survived by his wife, Judy, and a daughter.

Marcel M. Rockne, ARACT'58, BSME'77, of San Antonio, Texas, Dec. 4, 2018. Mr. Rockne served in the Army, 1946-1952. He worked for and retired from Detroit Edison, and was a licensed professional engineer in Texas. He is survived by a son.

Charles Vaughn, Jr., ARACT'58, of Sandusky, Ohio, Dec. 13, 2017.

George V. Wrend, ARACT'58, of Daytona Beach, Fla., Feb. 12, 2017. Mr. Wrend is survived by his wife, Henriette.

Michael H. Deskovitz, BSIM'59, of Lake Templene, Jan. 29, 2019. Mr. Deskovitz worked in hospital administration as chief financial officer in Detroit and Mount Pleasant. He is survived by four children.

Gerald A. Ament, BSIM'60, of Grosse Pointe Woods, April 7, 2019. Mr. Ament served in the Army, 1961-63; and worked 30 years as a fire safety engineer at Industrial Risk Insurers, retiring 25 years ago. He is survived by his wife, Patricia (Trish) and two children.

Chester "Chet" G. Janssens.

BSME'60, of Boyne City, May 8, 2019. Mr. Janssens served in the Army during the Korean conflict, and was president of Crusader Marine Engines in Sterling Heights until his retirement in 1998. He is survived by his wife, Cynthia, and four children.

Ronald E. Penny, BSIM'60, of White Lake, April 9, 2019. Mr. Penny is survived by his wife, Shirley, and two children.

Noel Smith, BSCvE'60, of Clinton Twp., July 9, 2019. He was an engineer with the Michigan Department of Transportation, retiring in 1995 after 42 years. Mr. Smith is survived by four children.

William C. MacNeill, AMT'61, of Lady Lake, Fla., July 23, 2019. He is survived by his wife, Letha.

Thurly H. Groat, AMT'62, of Columbiaville, May 10, 2018. Mr. Groat worked more than 50 years as a drafter in machine and structural design. He is survived by his wife, Carol, and three children.

Charles K. Loomis, III, BSArE'62, of Howell, Feb. 4, 2018. Mr. Loomis served on the LTU Alumni Board, 1996-97; and as secre-

tary/treasurer, 1997-2011. He is survived by his wife, Sandra, and three children.

Delbert Mitchell, BSIM'62, of Thousand Oaks, Calif., July 20, 2014. Mr. Mitchell is survived by his wife, Margaret.

Joseph T. Owczarek, BSIM'62, of Sterling Heights, Sept. 13, 2017. He is survived by his wife, Diantha, and two children.

William J. Rutten, BSIM'62, of Hendersonville, NC, Jan. 27, 2019. He is survived by his wife, Debra.

Bradley L. Smith, AMT'62, of Cedarville, Dec. 22, 2017. Mr. Smith worked for his in-laws' company, P. Carolin Co., as a manufacturer's representative in the automobile industry. He is survived by his wife, Patricia, and three children.

James Douglas Smith, BSME'62, of Traverse City, Nov. 13, 2016. Mr. Smith served in the Air Force, 1952-56, before attending college. He worked for several mechanical engineering firms before leaving the industry to build Jellystone Park in Traverse City in 1972. After 20 years, he sold his business interest in Jellystone and joined Century Specialties as a computer engineer. Mr. Smith retired in 2008. He is survived by his wife, Marlene, and three children.

Thomas D. Spanos, BSME'62, of The Villages, Fla., Nov. 9, 2018.

Billie J. Stewart, AMT'62, of Washington Twp., July 18, 2016. He is survived by his wife, Barbara, and three children.

Carl J. Breidenich, BSEE'63, of Port Huron, March 16, 2019. Mr. Breidenich retired in 1991 as an electrical engineer after more than 40 years at Detroit Edison. He is survived by nine children.

Lawrence C. Oestreich,

AEEtT'63 of Cheboygan, Dec. 15, 2018. Mr. Oestreich was an engineer at Ford Motor Company for 33 years. He is survived by his wife, Laura, and five children.

Gordon L. Rowe, AMT'63, of Durand, Aug. 15, 2012.

Arnold E. Spurlock, AEEtT'63, of Sarasota, Fla., June 21, 2017.

John G. Berent, BSEE'64, of Highland, Jan. 4, 2019. Mr. Berent served in the Air Force during the Korean war. He worked for Chrysler, then LTV, before settling at Holly Carburetor where he worked for more than 30 years. He is survived by his wife, Darlene, and four children.

Robert R. Ledel, BSME'65, of Cape Coral, Fla., and Harrison Township, April 30, 2019. He is survived by his wife, Linda.

Thomas W. Chettleburgh,

BSCvE'66, of Grand Rapids, Oct. 31, 2018. Mr. Chettleburgh served in the Armed Forces, 1956-59. He worked as a civil engineer for Williams and Works before starting Chettleburgh and Associates, a land surveying company. He is survived by his wife, Arlene, and three children.

Ralph Leo Selden, BSIM'66, of Louisville, Ky., May 29, 2016. Mr. Selden was an Army veteran. He is survived by his wife, Bonnie, and two children.

Richard A. Banks, BSIM'67, of Lakewood Ranch, Fla., June 16, 2019. Mr. Banks worked 35 years in the tire industry as an industrial engineer and later as an environmental engineer. He is survived by his wife, Susan, and two children.

Robert E. Jennings, AMT'67, of Brownsburg, Ind., June 8, 2018. Mr. Jennings worked for RCA and Arvin Industries for many years. He is survived by four children.

John J. Mathe, AMT'68, of Westland, Feb. 7, 2018. He is survived by his wife, Lois, and two children.

Michael Andriaschko, BSIM'69, of Sterling Heights, March 20, 2019. Mr. Andriaschko was an entrepreneur, and active in planning LTU alumni events in Texas in the 1990s.

Harry Downs, III, BSIM'69, of Leesburg, Fla., Feb. 26, 2016.

David R. Gray, ABCT'69, of Beaverton, Aug. 23, 2018. Mr. Gray worked in carpentry for 19 years before joining Consumers Energy, where he worked for another 22 years. He is survived by his wife, Jane, and two children.

Norman Hughes, BSAr'69, of Metamora, Oct. 3, 2019. Mr. Hughes is credited with helping to establish the Michigan Conservative Union. At LTU, he was class president for three years and student government president in his senior year. He also briefly served in the U.S. Department of Energy under President Ronald Reagan. He is survived by his wife, Susan, and three children.

William M. Mahar, BSIM'69, of Cresco, Pa., April 15, 2018. He is survived by his wife, Judith, and five children.

Robert (Bob) G. Rourke,

AEEtT'69, BSIM'74, of West Bloomfield, June 23, 2019. Mr. Rourke worked in information technology at the General Motors Tech Center until his retirement in 1998. He is survived by his wife, Linda, and two children. Ward W. Sparks, BSEE'69, of Fruitland Park, Fla., Sept. 1, 2018. Mr. Sparks retired from Detroit Edison in 1994. He is survived by his wife, Elaine.

Chester S. Sugierski, Jr., BSIM'69, of Port Orange, Fla., March 11, 2018.

Ronald J. Conklin, BSIM'70, of St. Clair Shores, Jan. 11, 2017. He is survived by his wife, Laura, and two children.

Thomas John Edwards, BSEE'70, of Grosse Ile, Sept. 4, 2019. Mr. Edwards spent most of his career managing the design and construction (facilities and engineering) for Detroit Osteopathic Hospital, Henry Ford Wyandotte Hospital, and Albert Kahn Associates. He retired from Wayne State University in 2017. He is survived by two children.

Richard R. McKee, BSAr'70, of Livonia, April 7, 2019. He is survived by his wife, Christine, and two children.

Edward A. Wieczorek, AMT'70, of Casselberry, Fla., Nov. 4, 2014. He is survived by his wife, Delphine, and two children.

Timothy A. Wilson, AMT'70, of Holly, Dec. 22, 2018. Mr. Wilson retired from Chrysler. He is survived by his wife, Lee.

Leonard M. Paddy, BSEE'71, of Bloomfield, Sept. 18, 2016.

Dennis F. Slavin, BSIM'71, of Clarkston, Jan. 7, 2019. Mr. Slavin worked 35 years for General Dynamics. He is survived by his wife, Marian, and three children.

Richard J. Weise, BSME'71, of Lake Orion, Oct. 27, 2016. He is survived by his wife, Carolyn, and seven children.

John C. Heintz, BSIM'72, of Green Valley, Ariz., April 13, 2019. He is survived by his wife, Elizabeth.

Angelo E. Roncari, BSPh'72, of Dowagiac, Sept. 5, 2013.

Eugene J. Schuler, BSME'72, of Canton, March 18, 2017. He is survived by his wife, Barbara, and two children.

Paul D. Wittmer, BSCh'72, of Warren, Jan. 3, 2019.

Ronald J. Gagnon, BSCE'73, of Clarkston, Feb. 19, 2015. He is survived by three children.

Glen E. Kollmorgen, Jr., AEEtT'73, of St. Clair, Feb. 28, 2013. Mr. Kollmorgen was an electrician at Pontiac Motor for 36 years. He is survived by his wife, Ruth Ann, and five children.

Ralph J. LeVigne, BSME'73, of White Lake, Jan. 16, 2012. Mr. LeVigne was an engineer at General Motors for 30 years, and at Ford Motor Co. for nine years. He is survived by his wife, Nancy, and two children.

Robert J. Saulnier, BSEE'73, of Clearwater, Fla., Oct. 10, 2018. He is survived by his wife, Donna.

Bruce A. Hempton, BSEE'74, of Jeffersonville, Ind., Feb. 18, 2016. He is survived by his wife, Kelly, and two children.

John L. Thomas, Jr., ACmT'74, of Southfield, June 21, 2019. Mr. Thomas was purchasing director for General Motors for more than 30 years at the Warren Technical Center. He is survived by his wife, Marilyn, and three children.

Carl A. Vogt, BSME'74, of Milford, June 13, 2018. He is survived by his wife, Kathryn, and one child.

Robert P. Baldwin, BSIM'77, of Brighton, June 17, 2017. Mr. Baldwin owned and operated a quality control company, and later a welding and fabrication shop. He is survived by his wife, Patricia, and two children.

Clyde C. Wilson, BSAr'77, of Livonia, March 31, 2017. He is survived by his wife, Doris.

Robert C. Crawford, BSIM'78, of Davisburg, Nov. 13, 2018. Mr. Crawford was a safety engineer at Ford Motor Co. for many years until he retired in 2001. He is survived by his wife, Betty Ann.

Donelda "Donnie" Dahline, BSBA'78, of Clarkston, Jan. 6, 2019. Mrs. Dahline spent her professional career as a manager for the Internal Revenue Service. She is survived by one child.

Peter J. Jansen, AIA, BSAr'79, BAr'80, of Northville, Aug. 3, 2019. He is survived by his wife, Deborah, and two children.

Robert C. Schaule, BSEE'80, of Troy, Sept. 24, 2018. He is survived by his wife, Sara Jane.

Robert M. Lechkun, BSME'83, of Ellington, Conn., June 26, 2017. Mr. Lechkun was an engineer at United Technologies in Connecticut, beginning in 1983. He is survived by his wife, Sandra, and two children.

Greg D. Roller, BSME'83, of Farmington Hills, Dec. 20, 2017.

Erin M. Galant, BSAr'85, of Utica, April 19, 2017. She is survived by her husband, James.

Mayurkumar K. Modi, BSME'86, of Plymouth, March 5, 2015. He is survived by his wife, Kala, and two children.

Virgil "Dave" David Maxim, BSME'87, of Lake Orion, Aug. 22, 2017. Mr. Maxim was an engineer at Ford Motor Co. for 28 years. He is survived by two children.

John August Mohr, Jr., BSBA'87, of Rochester, Dec. 1, 2018. He is survived by his partner, Steven Traister.

Andrew D. DeVault, BSAr'89, of Auburn Hills, April 14, 2016. He is survived by his wife, Kirsten, and one child.

Robert B. Brzezinski, Jr., AMET'90, BSBA'91, of Livonia, Oct. 25, 2019. He is survived by his wife, Stacy, and three children.

Dean M. Martin, BSME'91, of Canton, Aug. 29, 2019. Mr. Martin was an engineer at FCA/Chrysler for 26 years. He is survived by his wife, Linda, and two children.

Timothy M. McDonough, BSAr'94, of Royal Oak, July 16, 2013. He is survived by his wife, Sandy, and two children.

Fred Lynn Quillen, MBA'95, of Cape Coral, Fla., Jan. 14, 2019. Mr. Quillen had a 37-year career in engineering at General Motors' Cadillac Division, and served in the Michigan National Guard for nine years. He is survived by his wife, June, and three children.

Andrew Labick, BSIM'96, of Dearborn Heights, Feb. 22, 2017.

Steven W. French, MSIO'99, of Howell, April 13, 2019. Mr. French had a long career in sales, and co-owned a business, Zealtek, LLC, for many years. He is survived by his wife, Karen, and three children.

Jennifer Moore, BSME'99, of Madison, Wis., May 25, 2019. She is survived by her husband, Howard, and one child.

Joseph Aiuto, Jr., BSME'02, of Royal Oak, June 2, 2018.

Phillip James Krochmal, BFAI'12, of Southfield, Nov. 3, 2018. Mr. Krochmal worked for Secure-24 Managed Cloud Services. He is survived by his wife, Heather. Adam J. Potts, BSEE'12, of Plymouth, May 1, 2019. Mr. Potts worked at Yazaki International. In addition, he was a statewide organizer and trainer for regional recruiters for the Voters Not Politicians anti-gerrymandering movement.

Andrew James Schutter, BSCS'15, of Clinton Twp., Dec. 21, 2017.

LAWRENCE TECH FAMILY

James Corbin Holland, of Tulsa, Okla., age 77, died May 22, 2018. He was a lecturer in insurance studies at Lawrence Tech, and a corporate risk manager in the legal affairs department of William Beaumont Hospital in Royal Oak. Ruth Bressler, of West Bloomfield, age 84, died Aug. 27, 2016. She retired from the Lawrence Tech bookstore. She is survived by her husband, Alan, and two children.

DIT IN MEMORIAM

Paul V. Dobrow, BSIE'50, of Plantation, Fla., Nov. 9, 2019. Mr. Dobrow worked as a value engineer for the U.S. Department of Defense. During that time he traveled the world, teaching other engineers, and also earned a law degree. He is survived by five children.

Edward W. Gabert, BSArE'53, AIA, of Reed City, March 17, 2019. Mr. Gabert served in the Navy in the Pacific Theater during World War II. He taught architectural technology and computer aided design at Ferris State University. He is survived by two children.

Edward H. Larkin, AAuT'53, of Shelby Twp., March 1, 2019. Mr. Larkin was an Army paratrooper in Europe during World War II. After graduating he worked as a manufacturing engineer at General Motors' Fisher Body Division for 27 years. He is survived by three children.

Victor P. Hannawi, BCvE'61, of Roseville, Dec. 19, 2017. Mr. Hannawi was an engineer with Chrysler for 30 years. He is survived by his wife, Eva, and six children. **Lawrence Amprim**, BAPolSci'68, of Belleville, Jan. 9, 2019. He is survived by his wife, Martha.

Renee Perkins-Turner, BA-Soc'73, of Southfield, Oct. 21, 2018.

Gerald "Jerry" Anthony Missel, BSBA'65, of West Bloomfield, April 21, 2019. Mr. Missel retired after 30 years with General Motors. He is survived by his wife, MaryAnn, and four children.

John G. Bonner, BSBA'75, of Royal Oak, May 24, 2019. Mr. Bonner was an analyst and group manager at National Bank of Detroit for more than 20 years. In his retirement, Mr. Bonner enjoyed a career in real estate. He is survived by his wife, Nancy, and two children.

Donald A. Rowe, BSME'75, of Dallas, Texas, Dec. 19, 2018. Mr. Rowe served in the Army and Army Reserves, 1959-65. He went on to have a long and successful engineering career, retiring in 2008. He is survived by two children.

Ramesh P. Jethwa, BSEE'84, of Cedar Grove, N.J., Dec. 19, 2018. He is survived by his wife, Ranjana, and three children.



George Charbeneau, master craftsman

George Charbeneau passed away October 5, 2019, after a courageous battle with cancer. Mr. Charbeneau joined LTU in 1999 as the College of Architecture and Design's wood shop manager. He was honored this year at the 2019 LTU Service Awards.

Karl Daubmann, dean of architecture and design, said that "George cared deeply about the University and the students and he will be missed by all.

"Those that knew George are aware of the love he possessed for his family, friends, and his pets, as well as his enthusiasm for cars and motorcycles. He also expressed his creativity and talent making music, and by designing and building haunted houses. He was always willing to lend a helping hand or an ear to those around him," Daubmann added.



Oliver Coleman was education innovator

Oliver S. Coleman, of Detroit, died July 20, 2017. Dr. Coleman was Lawrence Tech's special project administrator, 1976-89.

The program he administered with the enthusiastic support of President Richard Marburger was Project TAB (technical and business). Dr. Coleman led hundreds of

students in 16 Detroit public high schools to form TAB clubs, setting up schedules of guest speakers, panel discussions, research projects, and field trips to acquaint students with behind-thescene operations and opportunities in technical and scientific businesses. Some of the clubs also set up co-op programs. TAB's goal was to interest more underrepresented urban students in STEM careers.

LAWRENCE TECH FAMILY CONTINUED

Joseph Savin, longtime faculty member

Joseph Savin, of West Bloomfield, died May 1, 2019. He was 88. Prof. Savin taught at Lawrence Tech, 1969-2010, and also taught six years at the University of Michigan where he received his bachelor's degree in architecture in 1955. He was an architect for Eero Saarinen & Associates in Bloomfield Hills.

Prof. Savin was a part of the Master Practitioner Folio Series in the College of Architecture and Design in Fall 2011. He also served five years as president of the Zionist Organization of America.

His survivors include his wife, Diane, and three sons. His family has kindly directed that memorial contributions may be made in his memory to the University. $\square BJA$

William Milliken, HD'79, three-term Michigan governor

William G. Milliken died October 18, 2019 in Traverse City. Mr. Milliken was Michigan's longest serving governor, from 1969-82. His record of environmental conservation and bipartisan cooperation made him popular with both Republicans and Democrats.

In 1979 Lawrence Tech awarded the governor a Doctor of Business Administration *honoris causa*, and he presented the commencement address.

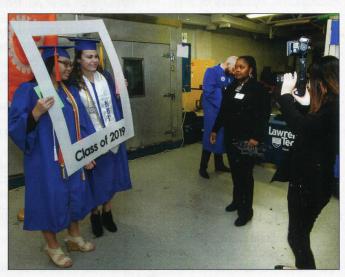
"I hope you have learned to be excited by ideas, for their own sake, whether or not those ideas happen to become part of your business," Governor Milliken said to the graduates.

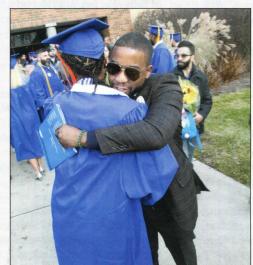
"You have all been told, I am sure, that you have just enjoyed the best years of your lives. For some that may be true. But if you have received a real education, if you are ready to utilize what you have learned, the best years of your lives lie ahead. As long as you put forth the individual effort and initiative required, each year can be the best year of your life." $\square BJA$



Michigan Governor William G. Milliken (left) was the 1979 commencement speaker and was presented an honorary degree by then-LIT President Wayne H. Buell.

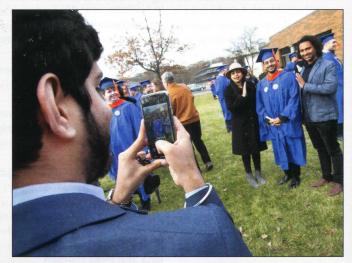
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THE BACK PAGE

First-ever on-campus December Commencement salutes grads

awrence Technological University held its first winter Commencement exercises on Saturday, Dec. 7 in the Don Ridler Field House.

Earlier this year, LTU moved its traditional May Commencement exercises to the campus, and now, a winter Commencement honored more than 100 December graduates who might be unable to participate in May 2020 ceremonies because of job or family commitments.

The Commencement address was delivered by Douglas Ebert, chairman of the LTU Board of Trustees, who received an

honorary doctorate of business administration. Donna Bell, BSEE'89, was honored with LTU's Alumni Achievement Award.

Ebert joined the LTU Board of Trustees in 2006 and has served as chairman since 2014. He was chief operating officer of the Cranbrook Educational Community from 2002-08, and previously spent 33 years in the financial services industry, serving in top executive positions at Michigan National Bank and the Manufacturers Hanover Trust Co. in New York City. Ebert has devoted a significant part of his life to improving education.



Bell has been with Ford Motor Co. for more than 25 years and is currently director of technology and features, strategy and planning. Previously, she was chief of staff to Ford's chief technology officer and director for Ford's Research and Advanced Douglas Ebert, left, chairman of the LTU Board of Trustees and honorary business doctorate recipient, with Donna Bell, BSEE'89, who was presented the Alumni Achievement Award, and President Virinder Moudgil.

Engineering Business Office. She was also responsible for Ford's university strategic alliances, STEAM strategy, and strategic external partnerships. Bell led the launch of the first-to-industry Sync in-vehicle infotainment system and was also instrumental in Ford's first implementation of its Auto Start-Stop system. Active in industry and community organizations locally and nationally, Bell served as president of LTU's Alumni Association for three years. $\square MR$

LTU's Don Ridler Field House dresses up very nicely for Commencement.

Additional photos on page 36

