THE WOW FACTOR

EXPLOSIONS. BANANAS. LIQUID NITROGEN. MIND TREKKERS CREATE A LOVE FOR SCIENCE IN THE NEXT GENERATION.
Building the Winning Tradition

Red Wings’ Jeff Blashill looked to him for advice. Goaltenders Jamie Phillips and Angus Redmond flourished under his leadership. And the Huskies will work with him to build upon recent success.

Coach Joe Shawhan—Michigan Tech’s 22nd head hockey coach.
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When students leave Houghton to study abroad, they volunteer at a children’s hospital in Peru, build human towers in Spain, and ice skate down Prague’s Vltava River.
Engineer a Better Welcome

You’re on an airplane headed to a country 8,000 miles from home. Tired. Alone. Cold. All you can see is water and trees. The pilot comes on. The plane reroutes to a new city. With no idea where you are, you wonder how you’ll make it to your final destination—when—and who can help.

Every August and January, nearly 350 new international students need to get to campus in Houghton. Our remote location and 218 inches of annual snowfall make traveling from abroad even more challenging. And for many students, it’s their first introduction to Michigan Tech and the United States.

“We always provided new international students with pickup from our local CMX airport (Hancock, Michigan). Inconsistent on-time arrivals and flight cancellations made it a huge logistical challenge. We had students displaced all over the Midwest or sleeping on cots in O’Hare (Chicago),” explains Cassy Tefft de Muñoz ’10, director of International Programs and Services (IPS) at Michigan Tech.

IPS decided the experience wasn’t the welcome Huskies deserved—and was determined to make it better. It started with a crazy idea. What if new students could be picked up in Chicago? And what if a team of international student volunteers could be there to greet them?

Chicagoland-area alumni wanted to help—many work and travel abroad. They know how overwhelming it can feel.

“Marie Cleveland ‘82 donates the venue and rallies the troops together with her husband Mike Cleveland ‘82. Bob Wojcik ‘91 and Bruce Hegberg ‘84 supply fruit and veggies, yogurt, chips, pizza, and dessert (Oreo, as it turns out, are not well received). Kyle Austin ‘91 and Dennis Sage ‘86 lend a hand and engage with students,” Tefft de Muñoz says.
Now when new Huskies land in the US they see ambassadors excited to meet and help them. Nerves disappear. They’re amped to discover what life at Michigan Tech holds.

Students from India, Germany, Mexico, China, and beyond land hourly beginning at noon. A shuttle goes back and forth from the airport to the Des Plaines Park District Banquet Center. There, students have a chance to eat, sleep, relax, and recover.

Then around 10 p.m., a Houghton-bound bus—stocked with warm blankets and water bottles provided by Housing and Residential Life—drives through the night. Stuck Huskies, including faculty, community members, and domestic students, have all hitched rides on the Chicago-Houghton bus, too.

Passengers arrive rested and ready. Orientation Team Leaders and resident assistants, along with staff from numerous departments, greet them with snacks and smiles. Welcome Week is about to begin.

What’s even crazier? Outside of logistics, no staff are involved—it’s peer-to-peer.

“There are really cool dynamics happening here. While coordinating the event, our student volunteers connect with successful grads. Alumni share favorite memories from their college days. And our new students meet peers, and learn about opportunities that await. It’s an enriching experience for everyone,” Tefft de Muñoz says.

It’s more than an airport pickup, it’s a Husky experience. And it isn’t typical, she says. “We get calls from other schools asking how we do this, and have even presented the model in regional conferences.

“No more than ever, it’s imperative for us to welcome our international students and scholars into our community with open arms—starting from the very first step they take here.”

**Keep the Chicago welcome tradition going.**

Have a venue to share? Resources to lend? Want to be part of the welcoming crew? Let us know—ips@mtu.edu.

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**No. 1 in the State for Social Mobility**

Want a better life for your children? Research proves a Michigan Tech bachelor’s degree means upward mobility. Looking at factors such as tuition, economic background, graduation rates, and median early-career salary, the 2016 Social Mobility Index by CollegeNET ranks us number one in Michigan for social mobility.

- Less than 1 percent of Huskies come from families in the top 1 percent of family income—2.2 percent end up there later in life.

- About 38 percent of Michigan Tech students come from families in the top 20 percent of household income; 61 percent of our students end up there later in life.

- 18 percent of students move up two or more income quintiles.

- The chance of a student moving from the bottom 20 percent of household income to the top 20 percent of household income is 47 percent.

Our undergraduate degrees have the power to change lives. The Equality of Opportunity Project (equality-of-opportunity.org) ranks Michigan Tech 10th in upward mobility out of 369 public colleges with selective enrollment. Project rankings, reported by the New York Times, are based on a study by Stanford, Brown, and Harvard university economists in a blind evaluation of millions of IRS records from the families of students and graduates at 2,187 universities across the nation.
Battle for the Broadmoor

Inside the John MacInnes Student Ice Arena on Saturday, March 18. A mob of Huskies narrowly missed skating over a flattened Bowling Green net minder (you saw the GIF, right?), and 4,466 fans in black and gold roared. Senior defenseman Shane Hanna had just scored in the second overtime. It was the first one-game WCHA playoff championship on a college campus since the Huskies beat North Dakota, 6-4, in Grand Forks, North Dakota, on March 13, 1965.

The Broadmoor Trophy—and an automatic NCAA Tournament bid—was ours.

#HuskyPride
Be Our Snapchat Friend

Let’s face it, it’s not easy to get to campus for a visit. Eight hours from Chicago. Ten from Detroit. If you want a real glimpse into life at Michigan Tech, we thought, why not ask our crazy smart students to snap it?

On September 9—Keweenaw Day—Michigan Tech launched its official Snapchat account (@michigan_tech). Student ambassadors take us along during study abroad, internships and co-ops, Career Fair, and alternative spring breaks—all their crazy adventures.

Snapping on campus? Be sure to head to the Husky statue and spiffy-up your selfie with a custom Michigan Tech filter.

Mechanical engineer and race car driver Reagan May ‘16 brought us to Florida’s New Smyrna Speedway as she competed in NASCAR’s Drive for Diversity Combine.

Thessaloniki, Greece, was calling and biological sciences major Morgan Charbonneau answered. She brought future Huskies inside the Acropolis, the Parthenon, and the Nike Temple. With Morgan as our Snapchat guide, we ate gyros, ordered a Greek pizza, and scratched a friendly city pup—all through a smartphone.

When communication, culture, and media major Casey Nelson traveled to Seoul, South Korea, he showed us what being a Husky abroad is all about. Navigating public transportation. Trying new and unique foods. And learning in a land with a lot less snow.

Alumna Britta Jost ’02 ’04 and the Society of Women Engineers (SWE) at Michigan Tech snapped as they competed in the SWE national conference for the very first time.
These are some of the words used to describe the women at Michigan Tech. In an anonymous survey sent to female students, staff, and faculty this fall, recipients were asked who they consider to be positive female role models on campus. 250 responses. 98 different names.


These are women who create the future:

“We sent the survey out to assess the needs of women on campus. The results will mean more inclusive programming. Based on feedback, we’ve already started a woman-to-woman discussion group.”

–Kellie Raffaelli, Director, Center for Diversity and Inclusion, Michigan Tech

“My RA and my Orientation Team Leader—they serve as a reminder I belong here.”

“Female faculty hold their own among male peers and add a different perspective to STEM fields.”

“My RA is smart and organized.”
There’s a new $15 million five-year grant from NASA


As the National Aeronautics Space Administration shifts its focus from low-earth orbit to deep space exploration, the agency is going to need building materials for vehicles, habitats, power systems, and other equipment that are lighter and stronger than those available today. The goal is to develop and deploy a carbon nanotube-based, ultra-high-strength, lightweight structural aerospace material within five years.

“This is a major accomplishment by Dr. Odegard and Michigan Tech,” says Bill Predebon, chair of the Department of Mechanical Engineering-Engineering Mechanics. “Greg has the experience and research accomplishments needed to lead such a large multi-university and industry institute.”

Check out more #mtuscenese on Instagram @michigantech
She stood at the edge of the field, the outside left corner. The grass, her teammates, her opponents—and the state championship—spread out before her. She knew before she stepped in for the free kick that it wasn’t right. The soccer ball hit the upper right corner of the crossbar. The goalie was wearing yellow. Her jersey was maroon.
The grass was bright green. She stood at the outside left corner. She knew she shanked the kick. Upper right corner. The goalie wore yellow.


Jess Splittgerber has replayed this scene in her head more times than she can count. Now a captain and midfielder on Michigan Tech’s soccer team, Splittgerber says after that high school game, she kept missing kicks. Again and again, the scene and her frustration from the state championship kept kicking around in her head.

Many think athletics is a show of pure physical prowess. But athletes, their coaches, and trainers know sports are as much a mental game as a physical one. Likewise, the rest of life—from calculating taxes, to sending emails, to presenting in public—is physical as well as mental, but humans are good at ignoring this mind-body connection. That’s why women’s soccer coach Michelle Jacob asked her team this past fall to start meditating and doing yoga during practice and before games.

“I’m not going to lie, before we started doing mindfulness exercises, I was pretty skeptical that there would be any real benefit,” says Kat Farkas, a midfielder and teammate of Splittgerber. “To my surprise, I have noticed that while practicing mindfulness, my mind was able to achieve a restful state—something difficult for a college athlete with a hundred things on her mind.”

Mindfulness is a skill the rest of us could stand to learn, too. From gaining clarity of mind to improving circulation to sleeping better, learning how to stay present and attentive in the moment is backed by science.

“You don’t have to go to a yoga class to feel the effect of taking a deep breath,” says Brigitte Morin, a lecturer of biology who teaches anatomy, lab science, and a class called Biology of Movement and Meditation. She’s also a yoga instructor and worked with Farkas, Splittgerber, and their teammates on regular meditations and restorative yoga.

“There’s physiology at work,” Morin says. “You’re stretching your lungs, activating a nerve, which tells your brain, ‘hey, this is happening,’ and then your brain responds parasympathetically by secreting hormones that relax you.”

The body’s parasympathetic nervous system helps regulate a cool, calm, and collected demeanor; the body’s fight-or-flight response is the sympathetic nervous system. It’s great for escaping tigers, thinking quickly during car accidents, or catching a pen that rolls off the table. It responds in the same way, however, to snarky emails and traffic jams.

“Our brains problem-solve—it’s what they do—and they’re good at it,” Morin says.

Too good. So good they start making up problems to solve—dwelling on past moments or projecting future ones. In fact, when confronted with a problem, like Splittgerber’s missed kick, the brain shuffles through every single related scenario, both real and imagined, then replays the sorry contents again and again looking for a way to fix the problem. The process happens instantaneously; most people don’t even realize it.

Brains can be retrained, though. Specifically, mindfulness makes the unconscious conscious by owning what’s happening emotionally and mentally right now. The key is not ignoring or disparaging thoughts and emotions, rather it’s acknowledging them and not distorting them by stuffing them down, criticizing, or overanalyzing. Mindfulness is like exercising mental muscles, strengthening the ability to refocus
Research over the last several decades broadly supports mindfulness and its physical and cognitive benefits. Neuroimaging is starting to reveal what parts of the brain are activated during meditation.

- **Anterior Cingulate Cortex:** breath awareness enhances activity to help regulate emotions and attention
- **Posterior Cingulate Cortex:** changes in connectivity with other regions may relate to self-awareness
- **Pre-frontal Cortex:** enhanced activation can improve executive functions and anxiety relief
- **Insula:** activation may help with awareness and emotional processing
- **Amygdala:** deactivation cools down emotional responses

The field of research is fairly new, with lots of possibilities. Past studies focused on the physiological effects of meditation in beginners, experts, and patients, and show an increase in mental clarity, calmer emotional states, improved blood circulation, boosted immunity, improved healing, and relief from anxiety and depression.

How do you get to wow? With Michigan Tech students (and increasingly, alumni) in yellow jerseys. Cool experiments designed to make kids give science a second (or first) look. And a passion to take those experiments anywhere in the country.

It's Mind Trekkers.

Cody Kangas, director of the Center for Pre-College Outreach, says it's a program—with more than 175 experiments and demonstrations—and a 10-year track record of reaching thousands of students across the country with an unwavering message: STEM is incredible.


"It all started in 2008 with Summer Youth Programs helping out at a larger outreach event in Detroit—YES! Expo," he says. "We brought our flair to it—flashy lights, loud music, liquid nitrogen, fire. Enthusiasm. It started to steamroll from there and we just kept growing."
Kangas says Steve Patchin, who co-created and directed Mind Trekkers from 2008 to 2014, had the idea to mobilize the science experiments SYP was doing in the summer and deploy them throughout the country.

Houghton to Houston. California to Washington, DC. Even a presence in Daejeon, South Korea. The list of locations for Mind Trekkers events gets longer as the program expands.

And while it may seem like a traditional outreach effort, there’s much more to it than that.

“It’s not about getting people to say Michigan Tech is where they want to go to college, it’s getting them to say, ‘I’ve found my calling. This is what I want to do with my life,’” Kangas says.

**INDUSTRY IS NOTICING**

“They already know Michigan Tech is a hotbed of talent, but when they see that talent communicating science knowledge to audiences, from kindergarteners to PhDs—employers eat that up because they recognize our students can be successful in the classroom and communicating in the real world. That’s an important piece companies want to invest in,” Kangas says.

Much of Mind Trekkers’ recent national growth can be traced to an event held in Houston three years ago.

“Houston is a microcosm of where we’re at right now,” Kangas says. “At the time, we started kicking around the idea of taking the program south, and the key reason was Dow Chemical. We had been doing an event for two years at Delta College in Midland and Rob Vallentine—at the time, head of STEM outreach initiatives globally for Dow—saw what we were doing and asked if we could bring it to Texas.”

Fifty Michigan Tech students traveled to Houston and partnered with San Jacinto College for that first event in 2014. Three hours in, Dow was committed.

“The first time I saw Mind Trekkers, I was hooked,” says Vallentine, now president of the Dow Chemical Company Foundation. “We love programs that engage the students in our communities. Mind Trekkers exceeds our expectations.”

For Jeff Lichon, public affairs manager with Dow in Houston, what Mind Trekkers brings to students is second to none.

“It could not have been more successful at San Jacinto College,” he says. “What started out in the first two years with the Michigan Tech team coming down has turned into a sustainable program that San Jac plans to continue into the foreseeable future. We had more volunteers this year than ever, supporting the nearly 7,000 students that came through the event. Feedback from the college is that students and teachers find the experience invaluable and that it ignites a newfound passion for science and technology that many students had not had prior to attending the event.”

**STAYING CONNECTED**

As the program grows, Michigan Tech alumni who participated as students are eager to connect a new generation of kids to STEM.

“I graduated in 2015,” says Kimberly D’Augustino, president of the Mind Trekkers student organization from 2012 to 2014. “I had two degrees in
engineering, a full-time job waiting, and an exciting future, but all I could think about was Mind Trekkers and how I could get my company, Boston Scientific (BSC), to jump on board.”

D’Augustino joined the STEM committee at BSC and started volunteering for events in Minneapolis-St. Paul. From there, she plugged back into the program.

“Mind Trekkers was attending the USA Science & Engineering Festival in Washington, DC, for the fourth time, and I had gone twice with the group,” she says. “Boston Scientific was looking at expanding their STEM outreach on the global level.”

She worked with Kangas to bring the two together and BSC sent her and two others to the festival where they were able to network and volunteer with Mind Trekkers. D’Augustino also attended an event for Lockheed Martin in Maryland this April and is working to bring Mind Trekkers to the Twin Cities.

Joe Kaus ’16 is a former president of Mind Trekkers and discovered the program in 2010 when he saw one of their road shows at a National Boy Scout Jamboree.

“It’s all about taking the science concepts I use every day as an engineer and finding a way to share them with someone who may not get that same joy out of it initially,” he says.

Kaus also attended the Lockheed Martin event this year and credits the program for helping him grow professionally.

“I can’t think of a job interview I have had in the past four years where I didn’t spend any time talking about Mind Trekkers,” he says. “If it wasn’t for this organization, I definitely would not have the job I have now.”

While many Michigan Tech alumni were introduced to STEM through Mind Trekkers or another Summer Youth Program, Kangas understands events across the country don’t always translate into admissions applications, and that’s okay.

“It’s more about being a part of this greater endeavor. Society needs people to finish high school, go on and get a post-secondary degree of value, and contribute.”

Alumnus Ed Leonard Jr. ’12 says it all comes back to the original mission.

“You get a chance to tell someone about something they’ve never known before and put it in their hands and say, ‘Now YOU try!’ They gasp, smile, exclaim, look in awe to their parents and at you, and they just say, ‘Wow!’”

That’s why Leonard’s yellow jersey is always in his closet, just in case he ever needs it.

mindtrekkers.mtu.edu/activities.php

In the demo “dragon’s breath,” graham crackers are submerged into liquid nitrogen—drained—then after waiting several seconds, it’s safe for kids to pop the frosty cracker into their mouths. Chewing and breathing releases a cloud of warm, moist air from their nose and mouth. It’s a playful way to show what happens to water vapor during a temperature change.

Ed Leonard Jr. ’12 leads a crowd favorite—LN2 is carefully poured into a two-liter bottle duct-taped to a lead brick, the top is secured, and the bottle is dropped into a plastic garbage can half full of water. The pressure builds, creating an explosion of water (and ping-pong balls).

Future Huskies? Try a demo at home! It takes five minutes and two ingredients to make Oobleck, a strange liquid substance that also acts like a solid (just try walking on ooey, gooey Oobleck).

mindtrekkers.mtu.edu
Silicon Valley Experience 2017
- Bring Michigan Tech’s Entrepreneurs to the Bay Area
- Talk to industry experts
- Get jobs/internships/exposure to high-tech businesses
Four days, 12 visits, 28 hours of company tours—Silicon Valley Experience puts 20 students smack-dab in the middle of high-tech. But one week isn’t enough. One place isn’t enough. So the experience powered since 2011 by fellow Huskies and friends of Michigan Tech has a new name—14 Floors. And it’s going nationwide.

“Fourteen Floors has become a signature program,” says logistical mastermind Adam Johnson ’98, based in the Office of Advancement at Michigan Tech.

“We can take this everywhere.”

The program’s incubator, Silicon Valley, reflects the entrepreneurial emphasis embedded in Michigan Tech’s strategic plan—as well as geographical economic realities. The Bay area is where the action is. Huskies are infiltrating at a rapid rate.

The tour is the brainchild of late School of Business and Economics Professor Bob Mark. “Attending a conference in Silicon Valley I toured a high-tech business and saw technology that blew my mind,” he told Impact Magazine in 2011. “It hit me that Michigan Tech students would really benefit from seeing what’s out there.”

Michigan Tech alumni and friends are on hand at every stop, guiding tours, Q&As, and hosting receptions. Regulars on the circuit:

- Cisco
- Autodesk
- Porter Family Vineyards
- Netflix
- Facebook
- Apple
- Ford
- Brocade
- Clari
- Twilio
- Evernote
- Hewlett-Packard
- Skymind
- Handshake

Also Skymind and Handshake, two alumni start-up companies rocketing to success.

“It’s fertile ground for being an entrepreneur. Students see themselves in these entrepreneurs, in some cases their former classmates who have raised tens of millions in startup funding, and are now running national and global operations,” says Johnson.
Like Adam Gibson, co-founder and CEO of Skymind, himself a Silicon Valley Experience alumnus. “He is such a geek, and the students love him,” says Johnson.

“Innovation is the major priority, not just a checkbox. The incentives are for innovation. It showed me the possibilities of what’s out there in the world.”

Adam Gibson, Skymind

Gibson is frank about the all-consuming demands of startup culture. It was three years before he cut himself a company paycheck. Employees had to get paid first.

Newcomers don’t eat much, sleep much—or have a social life, unless being crammed into a hacker hostel with dozens of other DevOps, nerds, and programmers counts. Life in the Valley is not all about blueskying and green meadows, bean bags and bike helmets, purple walls, and foosball tables. Even if your company stocks the fridge with craft beer, it doesn’t negate the underlying, self-directed work ethic required to succeed.

Work culture and values come into play everywhere, from companies with wide-open communal spaces and value statements painted on the walls, to traditional desks and cubicles. As Johnson notes, some students might prefer cubicles to beanbags. And that’s OK. These trips are all about finding what works. On both sides of the hire.

**Better Ideas for FORD**

This year, Ford—the corporate sponsor for the trip—flipped the scenario at its Palo Alto research facility. Students donned virtual reality headsets, worked on matrix presentations, and watched in-vehicle demos based on artificial intelligence. They were also asked how points of connection with the company work for them.

“Ford wanted to use their week of experience,” says Johnson. “What is Ford doing right, and wrong, to help the company improve recruitment? Is it open, friendly, team-spirited?” As Ford’s Dave Kaminski ’89 notes, the company motive is straightforward—they’re all about filling a pipeline of future employees for the automobile and mobility company.

“I hope students recognize that there is a different culture here. The Silicon Valley culture can really accelerate the way we develop technology. That’s why we’re here.”

Dave Kaminski ’89, director, Ford’s Palo Alto Research & Innovation Center

(Top photo) Skymind’s Adam Gibson splits his time between the Valley and Tokyo. The former Michigan Tech IT Oxygen Enterprise member’s artificial intelligence B2B company pioneers open-source deep-learning software tools like voice recognition, language translation, and automatic product recommendation.

(Bottom photo) A 3-D version of the Green Hill Zone from Sonic the Hedgehog. Students get behind the wheel (in an empty parking lot) to test Ford’s early-stage onboard virtual reality display.
At Twilio, students used company software and got a behind-the-scenes tour from Michigan Tech alumna Christine Roberts ’91. At Handshake, more alumni greeted visiting Huskies.

“Should any of us get a job at Twilio, one of the rites of passage for new hires is to use Twilio’s API to create an app or experience.”

Blogger Tommy Stuart

“I hope it opens up their eyes and inspires them to see the opportunities beyond what they might think of. You could start your own business, you could be involved in a startup, you could take a chance—there’s a whole world out there.”

Alumnus David Shull ‘15

More Huskies Meeting Huskies

The Husky connection went next-level at Brocade Communications, where executive chairman Dave House ’65 met with students from his alma maters, Michigan Tech and Northeastern University. He and Devyani Kamdar also hosted the closing reception at House Family Vineyards. With a panoramic view of the entire Valley from the top of the Saratoga hillside, nearly 70 alumni networked with each other, and more importantly—with students.

“I got to meet and hear so many stories of how our alumni got to Silicon Valley. I made more connections than I ever thought possible. I got so many questions answered, a lot of advice, and I had fun! I even got to drive a Tesla. How neat is that?!?”

Hanna Christensen, accounting major, ’18
At Clari, 1990 computational math graduate Amy Johnson’s “What did I love most about Michigan Tech” list is a favorite:

- Copper Country Cruising
- The Dog House and Uphill 41
- Blue Key Winter Carnival (especially skits and queens)
- Alpha Gamma Delta and Panhellenic
- Hockey
- Campus size
- Living off campus with awesome friends

Her take on startups? Build on relationships. “People in startups remember who they enjoyed working with before and come calling.”

“This is my third startup. They get pretty addictive after you do them. I hope I can give back and let other people be a part of that as well.”

Amy Johnson ’90, Vice President of Customer Success, Clari

At Hewlett-Packard, Tech alumnus Stuart Pann ’81 sits on the executive team and is responsible for HP’s global strategy. Stu spent 60 minutes showcasing large-scale 2-D and 3-D printing technology, geeked out over liquid-cooled computers with students, and held a Q&A session. More show-and-tell that can’t be acquired in any campus course or cold-call job interview.

(Left photo) At Clari, students were exposed to data science engines, predictive sales analytics—and a working garage door to symbolize its identity as a Silicon Valley startup.

(Left photo) Hewlett Packard Chief Supply Chain Officer and fellow Husky Stuart Pann, below, shares pivotal career-path moments with the group.

(Left photo) Huskies hop on zero-emission city buses to get to the next company stop.
Who Gets to Go?

The trip is so popular that nearly 100 students compete for 20 slots with timed pitches to a panel with representatives from Pavlis Honors College, the School of Business and Economics, and the Office of Advancement.

“As an entrepreneur, my favorite part was hearing the startup company success stories. It was a reminder that hard work can get you anywhere.”

Chetan Kumar Chaurasiya, fourth-year Computer Science major

Accepted students kick in $300. The buy-in is another exercise in entrepreneurial ingenuity. “Last year a startup transportation company provided a tour bus for us,” says Johnson. This year, the group used public transportation, and Uber, often commuting on zero-emission electric buses.

Travel itself can be transformative, says Johnson. “One student had never been on a plane. To get off the plane and see palm trees ... “

Silicon Valley regularly returns to Michigan Tech to spread what mentor and venture capitalist Kanwal Rekhi ’69 refers to as a virus—the contagious entrepreneurial bug he wants every student to catch. “When you have a half-dozen of these very successful entrepreneurs spending a week here, it propels that message,” says Johnson. “It infects them with that virus.”

14floors.mtu.edu

Why Fourteen Floors?

From Seattle to San Antonio, 14 Floors is the conduit that takes students there.

Fourteen is the atomic number of Silicon (the number of protons in the nucleus). The second-most abundant element on the planet gave Silicon Valley its name, coined in 1971 in Electronic News. Now the name’s synonymous with startups, angel investors, big data, and communications commerce.

And that’s where another 14 comes into play.

In 1965, Dave House did 14 job interviews in the course of two weeks. Bachelor’s degree in hand, the electrical engineering graduate who in 1974 would join Intel and lead development of the Pentium Processor, embarked on a job-hunting odyssey, deliberately choosing to experience work cultures and environments around the country. He thinks all Michigan Tech students should have that opportunity before they graduate.

That’s what 14 Floors is designed to be—an infinitely expandable structure analogous to the floors of a building, with something different happening on every floor, providing virtual suites of experiences for Huskies that connect them to innovators, entrepreneurs, mentors, and potential employers in Detroit. Boston. Seattle. And ... Houghton, which hosts biannual visits by alumni who participate in panel discussions, mentoring sessions, and judge business plan pitches.

It all hinges on fostering entrepreneurism and high-tech innovation in the context of global culture and economy, says Adam Johnson, 14 Floors creator. Cross-disciplinary events on and off campus are designed to do what one week in Silicon Valley doesn’t have enough time to accomplish.

The 14 Floors Silicon Valley Experience is organized and supported by the Office of Advancement, the School of Business and Economics, and the Innovation Center for Entrepreneurship in Pavlis Honors College. The trip is largely funded by gifts from Rick Berquist, who served more than a decade on the Board of Trustees, entrepreneurs and philanthropists Tom Porter, Dave House, Brocade Communications, Kanwal Rekhi, and the Ford Motor Company.

Don’t see your name or your company’s name? We can fix that. Email Adam Johnson at adam@mtu.edu if you want to get involved.
Being Blizzard

The Good, The Bad, And The Sweaty

An interview without speaking. Not even a bark or yelp or ruff. Hmmm. That can only leave one option; I had to do what any good Husky would do. I had to follow—chase—him around in his natural habitat. And actually, the he of this story isn’t a he as we assume.

Blizzard T. Husky is gender neutral.

What do we really know about Blizzard anyway? And about the Huskies who play Blizzard? “They don’t talk and they don’t reveal their identities—those are the biggies. Beyond that our students shape Blizzard,” says Joel Isaacson ’01, associate athletic director for Michigan Technological University, and Blizzard’s manager.

Officially named through a campus-wide vote in 1997, the mascot is celebrating 2-0 this year.

I arranged to meet not one, but two Blizzards deep inside the inner workings of the Student Development Complex on a Saturday hockey night in Houghton. Not just any hockey game. Game two in a WCHA playoff series against Lake Superior State University.

Of our 7,268 crazy smart students, five are employed as Blizzard. “Someone will email and express interest. We send them a questionnaire—what’s your height, weight, stature; can you skate, what animal do you identify with, does sweat bother you, the basics—then we see how they look in the suit, their energy, crowd interaction,” Mike, as we’ll call him, tells me.

“Too short, too skinny and the suit makes you look like a flying squirrel—no offense,” he says, shrugging apologetically.

None taken.

Mike has played Blizzard since his undergraduate years. Now a biochemistry master’s student, it’s his sixth and final year as Blizz.

During hockey games like tonight, with so many details to coordinate, two Blizzards work the John MacInness Student Ice Arena. The addition of the video scoreboard in 2013 overhauled the fan experience. Now with replays, highlights, and promotions, it’s a theater-like production behind the scenes.

Our other Blizzard tonight is a second-year mechanical engineering major. Prior to this year he had never even been on skates. Today, for the first time ever, he’ll lead the pre-game crowd warm up.

He’s nervous. And I’m nervous for him. Let’s call him Dave.

“I still get jitters when I take the ice,” Mike says. And, yes. “We’ve all bitten it and wiped out. It happens. Thankfully our fans are pretty understanding.”
Dave’s taken every Learn-to-Skate class offered through Michigan Tech Recreation this year. He shows up in uniform and kids think Blizzard is there for fun, but he’s really working on backward skating, crossovers, and generally not running the little Huskies over. Tenacious.

Underneath the fur, it’s white basketball shorts and a white t-shirt. “Helps keep the suits drier for the next person,” Mike says. “Sometimes kids will give me a hug and then ask, ‘Hey, Blizzard, why are you all wet?’”

I was relieved to learn the plush suit gets washed after every weekend.

Besides Dave’s big debut, tonight’s other challenge includes adjusting to the new, heavier head. “The old-new head is the best head—it’s the best looking. The old-old head is hard to see out of. This one is perfectly oval,” Mike says, showing me.

That Swagger

“Since Blizz can’t talk, we have to pantomime big,” Mike says. “Walk around like you own the place,” Dave adds.

“We’re never malicious, even opposing fans seem to enjoy Blizzard. He’s one of the nicer looking suits out there,” Mike says. “Boundlessly positive.”

Mike knows. He was Lead Blizzard from 2011 to 2013. Of course there are off nights with too little energy. “Five days after tonsil surgery I was back in the suit. There’s nights when we show up looking a little flat. It happens.”

“Cherry Festival in Traverse City is the worst because of the heat. The sweat is overwhelming. We tried to rig a Camelback, but it’s really awkward,” Mike recalls.

On average, Blizzard laps up four to five water bottles in a shift.

Sometimes things go off script. Like tonight when Blizzard decided visit a fan with a health condition. It brought a massive smile to her face. Blizzard smiled, too. (“Yes, you smile inside the suit. It’s a gut reaction,” Dave explains.)

“And every time someone calls my name—and I have a fairly common name—I turn. I can’t help it,” Dave says, shaking his head.

Friends get suspicious. “It’s, ‘Where were you Saturday night?’ You just have to hope they don’t look too closely in my car. A new suit sheds for three months,” Mike says.

“We hold babies, shake hands with the president. Being Blizzard connects you with very important people,” Mike says.

“President Mroz has borrowed the suit twice for his grandkids’ birthdays. Dr. Cook wore it to an alumni wedding once,” Mike says.

“My mom just loves it,” Dave says. “She has a picture of me skating as Blizzard on her phone. She’s so proud.”

I learned a lot following the stuffed dog(s) around. I learned it takes a lot of hard work and heart. But they said my assignment wasn’t complete; I had one last thing to do, to truly understand what being Blizzard is all about. Ta-da!

And no, it didn’t smell as badly as I imagined.
A Night In The Life

5:30
Arrive at John MacInness Student Ice Arena.

5:35
Load gear in an inconspicuous bag and transport to the hockey weight room.

6:45
Pre-game warmup (toss football back and forth).

7:04
Blizzard takes the ice.

7:13
Sprint from section L to the Zamboni doors. It’s t-shirt time!

7:20
Selfie with a fan from Indiana.

7:21
Deliver a custom Huskies jersey to Senator Gary Peters.

7:31
Catch breath after sprinting to La-Z-Boy Lookout. Missed camera spot.

7:35
Wardrobe malfunction—foot becomes un-velcroed.

7:40
Celebrate Huskies’ second goal with kids.

7:42
Do the dab with a little girl.

7:48
Quick change! It’s Mike’s turn at Blizzard. “Only a little bit moist, not bad,” he says.

7:52
Dave rehydrates and Mike discusses logistics for the next periods.

7:53
Puck Pit kids surge down the hallway. Blizzard, half dressed, hides.

7:55
Mike sighs; Blizzard really needs new shoes.

7:56
Blizzard No. 2 ready—damp—but with a set of fresh paws.

7:57
Reunite with kids in the Puck Pit. They demand pizza.

8:01
Selfie with a fan in the balloon-animal line.

8:03
High-fives down Lamplighter row.

8:04
First tail pull of the evening.

8:07
Deliver a piping-hot Domino’s pizza to one lucky fan.

8:14
Celebrate the third goal of the game.

8:15
Tail puller is back.

8:16
A gaggle of three ponytailed girls derail Blizzard’s next move.

8:20
Blizz razzes kids in the Blue Line Room. He has five minutes to spare before another giveaway, a Rozsa Center Prize Pack.

8:21
Blizzard faints. Kids pounce. We rush over—thankfully just puppy play.

8:28
Play bouncy ball with more “rink rats.”

8:28
Cartwheel.

8:29
Run and hide. Another wardrobe malfunction—paw off.

8:33
Period three. Some peace “backstage.”

8:45
Copper Country Anthem time.

8:50
Celebrate the Huskies’ fourth goal from Suite North.

8:56
Celebrate goal number five from Suite 5.

8:57
“Blizzard you’ve gained a lot of weight since I saw you last night,” says a fan.

9:06
Assist in a check presentation.

9:13
Goal seven, then a balloon sword fight.

9:18
Run to the Alumni Lounge.

9:20
Crowd thins; Blizzard hugs and high-fives.

9:21
Goal eight from the Mitch’s Misfits student section.

9:22
Huskies advance to the second round of the WCHA playoffs. Shutout.

9:32
Both Blizzards get locked out.

9:45
Pack up, dry off, gear back.

Good night, Blizzard.

Before Blizzard
In the 1970s and ’80s people around campus made costumes to serve as unofficial mascots. There was a bear. There was a mouse. There was an actual husky mascot named “Tech.”

Birthday: January 31
Fingers: Four
Middle name: “The” (Trekkies like to say it’s Tiberius in homage to James T. Kirk)
C AREA OF A TRIANGLE - HERON
C INPUT - CARD READER UNIT
FOR END-OF-DATA
C OUTPUT - LINE PRINTER UNIT 6,
C INPUT ERROR DISPLAY ERROR MESSAGE
501 FORMAT(11I5)
601 FORMAT(4H A=,I5,5H B=,I5,5H C
$13H SQUARE UNITS)
602 FORMAT(10H NORMAL END)
603 FORMAT(23H INPUT ERROR, ZERO VALUE)
INTEGER A,B,C
10 READ(5,501) A,B,C
  IF(A.EQ.0 .AND. B.EQ.0 .AND. C.EQ.0)
  IF(A.EQ.0 .OR. B.EQ.0 .OR. C.EQ.0) GO
  S = (A + B + C) / 2.0
      WRITE(6
The Oscar-nominated film *Hidden Figures* chronicles the story of three “human computers”—African American women mathematicians Katherine Goble Johnson, Dorothy Vaughan, and Mary Jackson—whose programming skills made astronaut John Glenn’s first orbital space flight possible.

Computer science was just a future fantasy then. Programming was unheard-of. Women did their calculations behind the scenes, unseen, unacknowledged, thought by most to be unimportant. Yet before the launch, John Glenn specifically requested that Johnson personally verify the calculations generated by the mission’s electronic computer. She calculated the output for 11 variables to eight significant digits before confirming that the computer’s calculations were accurate.

More than half a century has passed. Computer science has grown into the big shoes left by Johnson, Vaughan, and Jackson. Women have made and are continuing to make their mark. But not without some hiccups. Big ones.

Linda Ott lived through most of those hiccups. A professor of computer science at Michigan Tech and former chair of the Department of Computer Science, Ott remembers when she earned her PhD in Computer Science from Purdue in 1978. She was the third woman at Purdue to receive a computer science doctorate. She had no role models or mentors; there were no women on the computer science faculty, and her male advisors were less than encouraging.

As a master’s student, Ott tried to discuss with her advisor the pros and cons of going on for a PhD. “If I’m going into academia, I’ll need a PhD,” she said. “If I’m going into industry, I probably don’t.” He cut her musings short. “Linda, have you ever thought of having babies?”

Choosing the academic route, Ott earned her doctorate and came to interview for a faculty position at Michigan Tech.

“People told me it was too bad that I had come in March, ‘the ugly time of year.’ If this is what you call ugly …,” she replied. “I loved the campus; I loved the location. And I felt respected. There was no sense of bias.” She went on to interview at major industries, but she couldn’t resist the siren song of university teaching and the breathtaking Keweenaw Peninsula.

Although she entered academic computer science in the late ’70s, Ott understands what went before. In 1961, when *Hidden Figures* was set, Ott says, computers were massive feats of engineering, and since engineering was a male-dominated field, those early computing behemoths were built and operated by men. The software that ran the machines was invisible. No one understood how hard it was to write code. So the invisible women who knew how to perform complicated calculations were put to work on those tasks. “Their efforts were vastly unappreciated,” Ott observes.

Then computers began to appear in business and industry. Typically someone in the company had to learn programming skills, since there were no computer science graduates then. “Most technical workers at the time were male, so it was typically males who developed this expertise, and very often it was the introverted male who enjoyed hours working quietly alone, poring through manuals and learning to write code,” Ott explains.

Things changed in the ’70s. More women were attending college, and the new field of computer science seemed an excellent choice for women. “Many thought that since it was a new field, it was not dominated by long-standing male-influenced traditions,” says Ott. So undergraduate computer science programs saw a substantial increase in numbers of female students.

That’s when Linda Wittbrodt ’83 came to Michigan Tech to study computer science. “There were a good number of women in our class,” said Wittbrodt, who started in 1979. “For those of us who really enjoyed math and didn’t want to teach, it was a good option.”

Wittbrodt felt empowered by Ott’s presence on the computer science faculty. “It was very helpful to have an instructor who was female standing up on that big stage in Fisher 135, teaching us Fortran,” she recalls.

But simultaneously, in the late ’70s and early ’80s, personal computers began to appear as kits. Kits have to be built, and building things tends to be a male-dominated pursuit, so personal computer kits were marketed to boys. Boys built them, and boys learned to use them. This only reinforced the “nerdy male” stereotype, Ott suggests.

Then came a push to put computers in schools. But they came with no training for the mostly female, computer-clueless teachers, so the boys—who already knew something about computers—took them over. Teachers and female students found themselves out of luck.
There are nearly 1 million women in computing-related jobs in the US today.

Successful tech start-ups have twice as many women in senior roles as unsuccessful ones.

4% of the women in computing are Asian; 3% are African American and 1% are Hispanic.

In the 1980s, Tech awarded 129 computer science degrees to women.

Soon the educational system started adding “computing” to the curriculum. However, “computing” tended to mean keyboarding and word-processing, not programming, Ott points out.

So the rise of women computer science majors in the 1980s—from 11 degrees awarded to women by Tech in the ‘70s to 129 in the ‘80s—soon crashed, with 52 women receiving BS degrees in computer science in the ‘90s and only 24 from 2000 to 2010.

Wittbrodt, who worked as an engineer at Zenith Electronics and a software developer at Olmsted Engineering before becoming executive vice president for research and development at Janco International, watched the change from the workplace viewpoint. “I think women today almost have a bigger struggle than we did,” she says. “Computer science was more pure back then, all about learning the languages and writing the code. Now there is gaming, nerds and the like, which brings male images to mind. You say computer science, and you think of Steve Jobs, Mark Zuckerberg, Bill Gates—all men. And social issues are more talked about now, so the lack of females in computer science is more recognized, which automatically makes it a bigger issue to overcome.”

But Ott says, “The good news is that things are changing.” In fall 2016, Tech was back up to 51 female computer science majors.

Ott and many colleagues at Michigan Tech can take a lot of credit for that turnaround. Starting in 2000, Ott and Tech’s Summer Youth Program have been bringing high school girls to campus for a hands-on week of Women in Computer Science (WICS).

Ott and fellow computer science faculty member Charles Wallace reach out to K-12 students in the Houghton area with Code Ninjas workshops for middle school girls. Wallace and Leo Ureel Jr. ’95 ’03 do Hour of Code, part of a world-wide effort to interest young people in computing. For three years in a row, Ott has won competitive Google funding to sponsor summer computer science workshops for teachers. And she spearheads the University’s participation in two National Center for Women and Information Technology (NCWIT) programs: Pacesetters, a unique, fast-track program in which postsecondary institutions, startups, and corporations work together to accelerate their organizations’ number of technical women; and Aspirations in Computing, which provides girls and women with ongoing engagement, visibility, and encouragement for their computing-related interests and achievements.

NCWIT is the guiding light of 900 organizations working at every level from K-12 through careers. Established in 2004 by a National Science Foundation grant, NCWIT works through the different lenses of each of its member organizations to significantly increase girls’ and women’s meaningful participation in computing.

“Professor Ott is a very active NCWIT member who is advancing diversity and inclusion at Michigan Tech and in her community,” says Lucy Sanders, co-
founder and CEO of NCWIT. A lot has changed since the women in *Hidden Figures* did their computing unnoticed and unappreciated, says Sanders. “A lot, but clearly not enough. Today, women—and especially women of color—are essentially absent from technology innovation. And when they do make technical contributions, they are often ignored, not recognized, or not given credit for their ideas.

“This is especially troubling,” Sanders goes on to say, “given ample evidence of the critical benefits diversity brings to innovation, problem-solving, and creativity.”

Sanders thinks the US computing community has made a lot of progress on diversity and inclusion issues in the past decade. “By and large, the computing educational community is embracing the need for change and is in action,” she says. “And corporate leadership is starting to acknowledge the need for cultural reform in their technical organizations.”

So—slowly but surely—classrooms and workplaces are becoming more welcoming and inviting to women. And computer science graduates, from those already retired to those just launching their careers, have the same advice for young women interested in computing: “Go for it.”

Wittbrodt likes to give women considering computer science her lemons-to-lemonade speech: “Going into computer science, you will be a minority right now, but use that to your advantage. You will be the one who stands out because more often than not, you will be the only female in the room. Who do you think they will remember?”

In the early 1960s, when Pat Anthony was in high school, her guidance counselor tried to talk her out of studying electrical engineering.

“She was appalled,” Michigan Tech’s first female electrical engineering graduate recalls. When Anthony scored off the chart on a math and science aptitude test, the counselor re-scored the test on “the boys’ scale.” Anthony hit the 90th percentile there, too.

She started writing to engineering schools. Several said they didn’t accept women.

Michigan Tech was different. “Before Thanksgiving of my senior year, I had a scholarship to Michigan Tech,” she says. “It was clear they wanted me.”

Anthony wasn’t the first woman to study electrical engineering at Tech. But the others never finished.

She found support from older female students in her dorm, and later in her sorority, Phi Lambda Beta. The sorority was “for serious students,” Anthony says. “One of our songs went, ‘We’re here for our BS, not an Mrs.’”

Support from faculty? “My professors were hard on all freshmen, including women,” she says. But one professor—particularly intolerant of female students—asked if Anthony planned to come back for her junior year. When she said, “Of course,” he told her not to take any of his classes because he didn’t want to waste time on women. “He even offered me a copy of his schedule so that I could avoid him.”

By the time she was a junior, she was a pioneer. No woman had taken the classes she was taking. “It was all new ground.”

After she graduated in 1967 and entered the workplace, she continued to feel like a pioneer. “Everywhere I went, I was met with skepticism.” But her faculty advisor told her time and again to let her work speak for her. “I used that advice every day of my career.”

It’s been 50 years since Anthony earned her EE degree at Tech. “I’d like to think things are better today,” she says. “As the number of female engineers grows and they become successful, things improve.”

She’s doing her best to make sure the next generation knows they can dream big. She mentored young people wherever her career with IBM took her. “There is nothing more satisfying than seeing a young person dream of a future and believe it is possible,” she says.
Tom Kearly is a Michigan Tech Football guy ... no question about it. Kearly didn’t play football for the Huskies—he actually spent the first two decades of his coaching career somewhere else. But when he stepped down as the Huskies head coach last fall, he left as one of the biggest names in the program’s history, rivaled perhaps by only one other person—another Coach Kearly, his father Ted.

Ted Kearly, inducted into Michigan Tech’s Sports Hall of Fame in 1997, was head coach of the Huskies for just four seasons, 1969-72. During that span he became the most successful football coach in our history with a .806 winning percentage, three conference championships, and a perfect 6-0-0 season in 1972.

But perhaps Ted Kearly’s most significant accomplishment was making his adolescent son a Husky for life.
“I was a ‘Tech Kid’ growing up,” Kearly says. “I’ve always had a lot of feelings for Michigan Tech. I was a ball boy. My heroes were guys like Larry Ras, John Meyers, and Jerry LaJaunesse (all Tech Hall of Famers). I was a senior in high school when Michigan Tech won the 1975 National Hockey Title. Even when we lived in Mt. Pleasant we always kept track of how Tech was doing.”

After playing college ball at Winona State (Minnesota), Kearly began his coaching career as a graduate assistant there. He came home to spend a year here as a defensive secondary coach before moving on to NCAA Division I Central Michigan University. He started as a graduate assistant and became a full-time assistant coach for the Chippewas in 1983. He was promoted to the team’s offensive coordinator in 1991 and held that position until he had a chance to return to the Keweenaw in 2000.

Tech offered him the job as associate head coach and offensive coordinator—an offer he felt was too good to pass up.

“When we had the chance, thanks to (then head coach) Bernie Anderson, to come here to live in 2000, it was a family decision. I knew this was a great area for Patty and me to raise our family.”

Kearly served as Anderson’s chief assistant for six seasons, and when Anderson left for rival Northern Michigan University, Athletic Director Suzanne Sanregret ’93 ’06 didn’t have to look very far to find a replacement.

“Coach Kearly had a proven track record of success at the NCAA Division I and II levels,” Sanregret says. “He understood what the history and culture of Tech athletics was all about, not only as an assistant, but from his father who was a tremendous head coach for the Huskies.”

Looking back over Kearly’s tenure, Sanregret feels her choice was the right one. “Tom has elevated our program to one of the best in the GLIAC (Great Lakes Intercollegiate Athletic Conference) and NCAA Division II, not only on the field, but also off the field and in the classroom. He has built a culture that values athletic and academic excellence.”

She says Kearly’s players have gone on to be contributing members of society and make impacts in their communities because of the values instilled in them by Kearly while they were here. Kearly says a lot of credit goes to those who aspire to be Michigan Tech Huskies. “A great thing—maybe the best thing—about coaching at Tech is the quality of young person you get to work with,” he says. “I would always tell the staff that wherever they coached in their careers, they might coach a better athlete, but they would never coach a better kid.”

Kearly says the quality, character, and integrity of the individual players reflected back on the team as a whole. “In 11 years as head coach I had very few discipline issues that I had to address. A big part of our success was having smart kids who wanted to get better, and do the right thing.”

Brett Gervais ’16, of Lake Linden, played for Kearly and the Huskies for four years and was All-American following his senior season. Gervais says, to him, Kearly was more than a coach.

“He used his role as a coach to teach his players how to work hard, be respectful, and always do the right thing,” Gervais says. “Coach always made sure we were involved in volunteering activities around the Houghton area. His coaching achievements say a lot about how great of a football coach he was. But the positive impact he had on his players in regards to life after football is what made playing for Coach Kearly a privilege.”

Not only did Kearly impact those who played for him, but those who worked beside him. Steve Olson worked with Kearly for six seasons, the last three as defensive coordinator. In November 2016, Sanregret picked him to succeed his former boss. He calls working with Kearly “a pleasure” and says if he would have stayed “for three, 10, or 50 years as the head coach, that would have been fine with me.”

Olson says the things Kearly repeated to his players demonstrate the character he was trying to instill.

“He’d say, ‘Keep your head down, your mouth shut, and keep moving forward,’” Olson says. “Translated—‘Work hard, don’t complain, and work to make things better.’”

The new skipper says Kearly always put a strong emphasis on family. “He’d say to the players, ‘When you go home, travel safe and tell your mom that you love her.’”

“A great thing—maybe the best thing—about coaching at Tech is the quality of young person you get to work with.”
Gervais agrees with Olson that family ties were important to Kearly. “He always made sure when we went home on holidays we thanked our high school coaches and told our parents that we loved them.”

Olson says he’s honored to take over a program with a long and storied history. “Like Coach Kearly said many times, ‘Michigan Tech has always been and will always be an outstanding academic institution. We’ve worked hard to create a great football program—and one that our players, fans, and alumni can be proud of.’ My staff and I will work hard to continue that tradition.”

While Kearly’s departure did take many by surprise, he says it wasn’t an impulsive decision.

“Patty and I had talked about me retiring for a couple of years,” Kearly says. “I think a big part was for 38 years I haven’t enjoyed the fall. I think it’s the best season of the year and I haven’t been able to enjoy it. I want to see August through November.”

He says 17 years at Tech, 11 as head coach takes its toll. “You are in charge of 115 young men and you live through and work through all their individual victories, defeats, ups, downs, and concerns, as well as the those of the team and the program. President Mroz (referring to his own 2018 plans to return to faculty) made a statement that I thought was true of my own situation: ‘It’s time.’”

Even though he’s stepped away from coaching, Kearly says the program will always be important to him and to that end, he is looking toward the future.

“We are in the process of finalizing the plans for a new stadium. It’s the one facility that is really needed. We’ve had influential alumni make generous pledges to help build it and are in the final stages of getting that project underway.”

Thanks to generous supporters, new turf, lighting, and a VIP fan pavilion were added to the stadium and field. Additional upgrades that need alumni and friend gifts include new seating for 2,500 fans, a press box, concession area, restrooms, and parking.

“We want to enhance the game-day experience to make the Husky Football Stadium and Sherman Field the most competitive NCAA Division II facility in the nation,” says Bill Roberts, associate vice president of advancement and alumni engagement. “We encourage alumni and friends to show their Husky pride to support football, a Michigan Tech tradition, and to ensure Huskies have exceptional facilities for the future.”

Sanregret says the new stadium would be a fitting way to honor father and son. “Both Ted and Tom have left a legacy of excellence. And our stadium renovations, funded by those who they have impacted, would be a great way to honor what they mean to Tech and the football program.”

Tom Kearly’s relationship with Husky football began in childhood watching his father. Rest assured Kearly’s relationship with the program isn’t over. He will always be a Michigan Tech Football guy. Only now he’ll watch games without a clipboard or headset.
Who: Kemin Fena, Class of 2017, Biomedical Engineering major, International Spanish minor
What: Study abroad + service learning project
Where: La Universidad del Pacífico, Lima, Peru
When: Summer 2014
Why: Immerse in the Spanish language. Gain international service work experience.

Immersion is the best way to learn another language, so I knew right away I wanted the homestay option. I was humbled by the generosity of my host family and their willingness to accept me into the family as one of their own. I loved sharing meals with them—the entire family sat down to simply enjoy each other’s company while eating delicious food. My host mom even taught me how to cook some of my favorite Peruvian dishes!

For my service learning project, I volunteered at a children’s hospital. I met children who dreamed of getting a college education but their families couldn’t afford to send them to a university. I realized how fortunate I am to be getting a college education, and this inspired me to become even more dedicated to my studies. Helping others was incredibly rewarding, and I have since decided to pursue a career in medicine so I can continue to help other people. Today, I remind myself to be thankful for many things I used to take for granted and regularly seek out volunteer opportunities in the local community.

Who: Mario Calabria, Class of 2017, Mechanical Engineering major, International Spanish minor
What: A study abroad program “as far away from numbers as I could get”
Where: Valparaiso, Chile
When: Spring 2016
Why: Follow in the footsteps of a friend who studied abroad in Chile and came home with a new approach to life

Chile has a human-centered culture. Part of that is showing courtesy. Whenever I was on the bus, younger people stood up and gave their seats to anyone older who got on the bus. They show each other honor and respect, and that’s important to me. People take breaks throughout the day to spend time together. You never eat lunch alone—it’s just not a thing. Being a part of that culture helped me become very clear about the currency my life operates on. Chileans make decisions based on happiness instead of money. The two things that fire me up, that make me happy, are service and teaching. I had always dreamed of being a doctor, but after my time in Chile, I realized the demands of medical school and the practice of medicine were not for me. They wouldn’t make me happy. I now have the goal of opening up a coaching school that teaches kids soft skills, like empathy, the confidence to ask questions, the ability to express emotions.

For me, the value of studying abroad was getting away from the mindset of pursuing success and gearing myself toward pursuing happiness. Success will not always guarantee happiness, but happiness will more than likely lead to success.

“Studying abroad had a profound impact on my academic career, my goals, and my perspective of the world.”

- KEMIN FENA

“Chilean culture places so much emphasis, worth, and value on people-to-people time. It was beautiful and so invigorating.”

- MARIO CALABRIA
What: Studying abroad in Spain—for the second time
Where: Universitat Politècnica de Catalunya, Vilanova i la Geltrú, Spain (about 40 minutes south of Barcelona)
When: Now
Why: In a smaller Catalonian town, you’re immersed in the Catalan culture and language. It’s difficult and challenging, but I’m not a tourist—I’m part of something.

The first time I studied in Spain, I was new to Europe. I took two classes that included a lot of excursions and museum visits, but when I wasn’t in class, I was on my own. It was a crazy experience, and I knew I wanted to go back. Barcelona is in Catalonia, where they speak mainly Catalan, but because it’s such a large city, there were a lot of Spanish and English speakers. When I decided to study abroad a second time, I wanted to be away from the city. I wanted to be part of a smaller community.

I’ve joined a club at the local university that does a Catalan activity called Human Towers—people stand on each other’s backs and create towers. There’s also a week-long carnival here—Vilanova Carnaval—with events every day. The biggest and most famous event is Comparses, and a few classmates and I were able to participate. We dressed up and danced and paraded around the whole town. At the end, all participants met in the town square and had a candy war. My shoes are still a mess from that day.

I’ve never been one to have a dream career where I know exactly what I want to do. When I studied abroad, it opened up a whole new perspective. I realized how much I love the culture, and that’s why I went back. I want to expand that and continue being abroad and learning.

My Berlin research experience was through the Research Internships in Science & Engineering (RISE) program and was funded by the German Academic Exchange Service (DAAD). I spent 10 weeks working in a chemistry lab in Berlin at Paul-Drude-Institut, which is associated with Humboldt University. The program places students from the US, Canada, and the UK in labs across Germany for a summer. The highlight was getting to work in a clean room lab for the summer. There was also one weekend where all the RISE students met in Heidelberg, Germany, and I was able to present my research to the other students in the program.

I got to travel to 13 countries while abroad: Czech Republic, Germany, Austria, Denmark, Estonia, Finland, Italy, Latvia, Lithuania, Norway, Poland, Slovakia, and Sweden. It’s 14 if you include Vatican City.

To see more Huskies abroad, follow mtu.international on Instagram.

mtu.edu/magazine/offleash

“Every time I travel abroad, I grow.”

– Kara Jelley

Who: Peter Winegar, Class of 2017, Chemistry major, Computer Science minor
What and Where: A study abroad program in Prague, Czech Republic, followed by a research internship in Berlin, Germany
When: 2016
Why Prague: One of my favorite book series as a kid, the Bartimaeus Trilogy, had scenes set in Prague. It’s also centrally located in Europe—I was able to travel to Poland, Germany, Slovakia, and Austria on bus or train rides that were never longer than 10 hours.

Why Berlin: I wanted to see a research lab and the research mentality in another country. I spent the spring semester in Prague learning the Czech language, Czech cooking, Czech literature, Czech history, and European Union history. There were weekly cookouts where we made traditional Czech food, and weekly hikes where we took trains to various spots throughout the country and hiked. My favorite experience was getting to ice skate on the Vltava River. It hadn’t frozen in years, but during the winter I was there, parts of it did.

My Berlin research experience was through the Research Internships in Science & Engineering (RISE) program and was funded by the German Academic Exchange Service (DAAD). I spent 10 weeks working in a chemistry lab in Berlin at Paul-Drude-Institut, which is associated with Humboldt University. The program places students from the US, Canada, and the UK in labs across Germany for a summer. The highlight was getting to work in a clean room lab for the summer. There was also one weekend where all the RISE students met in Heidelberg, Germany, and I was able to present my research to the other students in the program.

I got to travel to 13 countries while abroad: Czech Republic, Germany, Austria, Denmark, Estonia, Finland, Italy, Latvia, Lithuania, Norway, Poland, Slovakia, and Sweden. It’s 14 if you include Vatican City.

To see more Huskies abroad, follow mtu.international on Instagram.

mtu.edu/magazine/offleash

“My experiences in Prague and Berlin showed me that if I’m able to succeed in places where I don’t speak the same language as everyone else, I will be able to succeed back home where I do.”

– Peter Winegar
Q&A

The Inimitable Roxane Gay

New York Times bestselling author, cultural critic, and professor Roxane Gay has Michigan Tech roots.

Before she wrote Ayiti, An Untamed State, Bad Feminist, Difficult Women, and Hunger, Gay ’10 was a graduate student in Tech’s Rhetoric and Technical Communication program.

Even back then, Gay’s classmates took notice of her knack for eloquently cutting to the chase, for getting to the heart of the matter. And really, any matter—from the theoretical and philosophical, to pop culture and celebrities. Regardless of the topic, Gay was at the ready with provocative, thoughtful comments.

It’s something her many fans admire, too. With a New York Times op-ed column, 202,000-some Twitter followers, and events that sell out in a matter of minutes, Gay is in high demand. But during her Michigan Tech days, some of us were lucky enough to have front-row access to Gay, back when she hosted a weekly gathering of—dare I say it—bad feminists in her Hancock apartment. A group of those friends—Laurence Jose ’10, Karen Koethe ’08, Rebecca Miner ’15, and Joanna Schrieber ’13—came up with the following questions.

As a graduate instructor at Michigan Tech, you assigned an infamous project that required students to write an entire essay using only one-syllable words. Using only one-syllable words, describe your experience as a graduate student at Tech.

My time in grad school was quite a chance to grow, to think about how to best take a stand, to learn how to give back, to learn how to teach, to write, to live in a far-off place, and to love.

You are a bestselling author, you’ve interviewed icons like Toni Morrison and Madonna, and given a TED Talk. What stands out as one of the most surreal moments of your career?

Interviewing Madonna was absolutely one of the most surreal moments. When I got the call with the offer to do the interview, I couldn’t quite believe it because she had read Bad Feminist and requested me for the interview. And then a couple weeks later I was sitting in her living room and drinking wine as she held forth and I thought, “How could this possibly be my life?”
Your friends would like to know when you are going to interview Beyoncé. Let’s say you get to ask her only one question. What would it be? I would like to know when I am going to interview Beyoncé, too. I would die. I would just die. If I only had one question, I would ask her what it takes to go from being part of Destiny’s Child, where she sang pop anthems, to the craft and control she wielded in “Lemonade.” How did she create the space to grow as an artist in an industry that doesn’t really want women pop singers to think for themselves or to grow?

In both Bad Feminist and Difficult Women you take on labels that have negative connotations and turn them into something positive. What do you like about exploring—and challenging—preconceived notions about identity? When I titled Bad Feminist and Difficult Women I was thinking about challenging preconceived notions of feminism in the former, and women who are shortsighted labeled as difficult in the latter. I wanted to take these labels that are often wielded in demeaning ways and reclaim them, and challenge those preconceptions so many people have. Both titles have provoked some really interesting conversations, so mission accomplished, as they say.

You’ve described yourself as a private, shy person, but you now speak to massive crowds, interview celebrities, write for the New York Times, and are approached by fans whenever you leave your house. How do you cope with fame? I don’t think of myself as having fame, which helps quite a lot with coping. I also try not to take for granted any of the opportunities I’ve been afforded in recent years. I recognize the blessings, and I am enjoying them very much.

In what ways has your rhetoric and technical communication degree informed your writing today? My coursework and the intense amount of research I had to do in writing my dissertation really taught me about thinking about audience and constructing rigorous arguments. My degree also helped hone my ability to write under pressure.

Some of your stories take place in the Upper Peninsula, written in such a way that the location is almost another character. Why is the UP a compelling place to write about? I’ve never lived anywhere as distinct as the UP. Place is indeed a character in many of my stories. The UP in particular is so isolated and so insular that to be a part of it, and not be a part of it, offered a lot of creative opportunities. And after five years in the UP, I admit I grew fond of the place. The stories I write set there are, in many ways, a love letter, particularly North Country.

You’ve accomplished so much. What do you want to do that you haven’t done yet? There is so much I want to do—take a vacation, mostly. I also want to write a television series and a Sweet Valley High book.

One of your friends describes you as a public intellectual, the likes of which society has not seen for a long time. Why do you think it is important to bring scholars like bell hooks and Michel Foucault into public conversation? That is a very kind thing for my friend to say. I struggle with the label of public intellectual, mostly because that title feels very fancy and I do not feel very fancy. That said, it is important for scholars to be part of the cultural conversation, particularly when they can do so in accessible ways. They often bring invaluable perspectives to how this world works and the choices people make. I don’t want to imagine a world without the likes of a bell hooks or Michel Foucault or Helene Cixous and so on.

How do you cope with disagreement? Have there been instances when it became a positive and productive element? It really depends on the origin and nature of the disagreement. If someone disagrees with me in good faith, I try to both respect and hear where they are coming from, even if I can’t change my mind. When someone disagrees with me for the sake of being obtuse or contrary, well, I respond accordingly.

What keeps you up at night? The current administration and the long-term effects of their ignorance, xenophobia, racism, and destructive policies.

What is something you believe in that almost nobody agrees with you on? I DON’T believe in weather reports. I know this makes me an outlier.

What are your superpowers? What is your kryptonite? My superpowers are an ability to watch an exhaustive amount of television and read quickly. My kryptonite is Channing Tatum. He is so charming, and I am powerless in his thrall.

Best place to study at Michigan Tech
Java Shop
Favorite word
F*ck
Pick a UP specialty:
Nisu, pannukakku, or pasty
Pannukakku
Best reality TV show
Vanderpump Rules
Most annoying question you are asked on a regular basis
What is feminism?
Honestly, how is this still a question?
Favorite UP hangout
Wherever my friends were hanging out. Also, the Baraga (Ojibwa) casino.
Thing you don’t miss about UP/Michigan Tech
I don’t miss the snow at ALL.
My Michigan Tech Portal

Use MyMichiganTech to search, share, and connect.

Search the Alumni Directory. Share news with classmates. Connect with fellow Huskies.

Visit the new MyMichiganTech: mtu.edu/alumni/mymichigantech

Keweenaw Chapter Raffle

Buy a ticket to support students.

Sponsored by the Keweenaw Chapter of the Michigan Tech Alumni and Friends, the Keweenaw Royale Raffle proceeds will support scholarships for students in Baraga, Houghton, Keweenaw, and Ontonagon counties to attend Michigan Tech.

Raffle winners will experience the beauty of the Keweenaw. Prizes include an Isle Royale getaway, Lake Superior fishing charter trip, and a Copper Country bed and breakfast package. Drawing takes place September 8, 2017.

For more information or to purchase tickets online, visit mtu.edu/alumni/KACraffle.
Alumni Award recipients honored at Reunion

Michigan Tech Honors 2017 Alumni Award Recipients

Outstanding Young Alumnus/a
Kevin Baker
BS Biomedical Engineering ’04 and MS Materials Science and Engineering ’05

Outstanding Service Award
Paul Mikkola
BS Metallurgical Engineering ’66 and Honorary PhD ’89

Distinguished Alumni Award
John Rockwell
BS Business Administration ’79

Honorary Alumni Award
John Dau
DTE Energy

Humanitarian Award
Sanna Roling
BS Biological Sciences ’67

Humanitarian Award
Nicholas Schreiner
PCMI-MS Environmental Engineering ’11

Board of Trustees Silver Medal
John L. Drake
BS Mechanical Engineering ’64 and MBA ’69

Norbert J. Verville Sr.
BS Business Administration ’60

Honor Alumni and Friends
The Michigan Tech Alumni Board of Directors seeks nominations for the 2018 Alumni Awards, including Outstanding Young Alumni, Outstanding Service, Distinguished Alumni, Honorary Alumni, and Humanitarian Award. Awards are presented each August at the Alumni Reunion.

Read award descriptions and download nomination forms at mtu.edu/alumni/recognition/awards or contact 906-487-2400 or alumni@mtu.edu Deadline to nominate is December 1, 2017.

Broomball Tournament Recap


This year’s Alumni-Student Broomball Invitational during Winter Carnival brought a record 16 teams to campus. More than 140 Michigan Tech alumni and friends gathered for the weekend. Congratulations to the tournament champions, alumni team Pirate Sheep, on their second consecutive win.

A recording of the championship game and tournament photos are on the IRHC Broomball Facebook page: facebook.com/irhcbroomball.

Save the date for the 2018 Broomball Invitational on February 9-10!
Superior Ideas Turns Five

Build a greener, cleaner snowmobile. Restore river habitats for coaster brook trout. Bring healthcare to Ghana.

Launched in 2012 and created by Michigan Tech, Superior Ideas offers researchers a new source of funding for small projects, pieces of larger research efforts, and public service projects.

Researchers share their projects, and anyone can contribute any amount to support them.

Natasha Chopp ’06 ’15 ’17, director of research opportunities, says donors give to projects they feel connected to, and they also may be interested in the project’s goals. “By providing support they gain a connection to the project and are making a difference,” she says.

In five years, Superior Ideas has:
- Reached 50 countries and 40 states.
- Received 1,130 donations to 78 projects.
- Raised $339,307 to fund projects.

Two newer Superior Ideas challenges:
- Rekhi Innovation and Advanced Motorsports Enterprise Teams. These crowdfunding competitions are for Enterprise teams to promote and support student innovation, entrepreneurship, and collaboration. Prize money is awarded to teams who raise the most money.

For more information or to learn about current projects, visit superiorideas.org.
Class Notes

Share your news! Post your class note and photo online at MyMichiganTech or email to alumni@mtu.edu. New addition in your family? Let us know. They will receive a special gift from Blizzard T. Husky.

1960s

1 Richard Job PE ’63 (Mechanical Engineering) is the recipient of the 2016 Evelyn E. Rosentreter Standards Award in recognition of his outstanding leadership and contributions in the development and harmonization of national and international agricultural equipment and tractor standards.

James Mitchell ’65 (Chemistry) has again been chosen by his peers as one of the Best Lawyers in America for his high caliber of work in the practice areas of litigation, intellectual property law, patent law, and trademark law. Mitchell says he is humbled by this honor and thanks his clients for giving us the opportunity to make this possible.

Nancy Mitchell ’65 (Business Administration) had the honor of planting the tree of choice in the Salt Lake City International Peace Gardens when she retired as president of the Salt Lake Council of Women in May. Mitchell has lived in Canada, Switzerland, and the US and traveled to Greece, Israel, England, Russia, and China. She spends her summers on Wolseley Bay on the French River in Northern Ontario. She is president-elect of the Salt Lake Branch of the American Association of University Women and serves on the Executive Board of the Utah Health Policy Project. Her career included executive director of the Women’s Business Center for 11 years, certified financial planner with Utah Retirement Systems for four years, and 11 years in journalism.

1970s

Robert Harssel ’70 ’77 (Forestry, Business Administration) recently retired from the North Dakota Forest Service (a department of North Dakota State University) after more than 38 years of service (October 1, 1978–December 31, 2016). Since 2011, Harssel served as forest stewardship manager. He lives in Lisbon, North Dakota with his wife Nancy and his adopted grandson. He follows Michigan Tech hockey even though his son is a University of North Dakota graduate and a fan of the Fighting Hawks.

Jeffrey Blank ’77 (Computer Science) is a site reliability engineer at New Relic, Inc. and lives in Portland, Oregon.

1980s

Paul Juodawlkis ’86 (Electrical Engineering) has been named an Institute of Electrical and Electronics Engineers Fellow for his contributions to optically sampled converters and waveguide amplifiers.

1990s

Lisa Fernstrum ’91 (Biological Sciences) is the current board president of the Menominee Marinette Area Community Foundation.

2000s

Andrew Walz ’00 (Mechanical Engineering) and Stephanie (Criss) Walz welcomed their third little Husky, Benjamin Matthew, who was born July 2016.

Jody (Kositzky) Mathias ’01 (Chemical Engineering) and Frank Mathias ’05 proudly announce the birth of their son, Conor Kendrick on July 6, 2016.
Julie Marinucci ’02 (Mining Engineering) has been appointed by Minnesota Governor Mark Dayton to be on the state’s higher education committee. sehinc.com/news/seh-engineer-appointed-governor-higher-ed-committee

Ariana (Jeske) Occhipinti ’05 (Civil Engineering) and Christopher Occhipinti ’04 (Physics), and their daughter Aurora announce the newest addition to their family, Dario Patrick who was born on October 25, 2016 in Grand Rapids, Michigan. The family lives in Sparta, Michigan. Christopher is employed by NTH Consultants, Inc. and Ariana is employed by Prein & Newhof, both located in Grand Rapids.

Jennifer (Bzura) Lanzafame ’05 (Chemical Engineering) married Jeff Lanzafame in August 2015 at Squaw Valley Resort in Lake Tahoe. The couple met playing kickball in the San Francisco Bay Area and reside there today. Lanzafame received her PMP certification and started a new job as a senior project manager for process improvement in the Development Sciences group of BioMarin Pharmaceutical Inc.

Derek Botero ’07 (Mechanical Engineering) and Alexis Mizrahi-Botero welcomed their son, Eli Joseph, on September 5, 2016 in Charlotte, North Carolina. Proud aunt, A. Tara Botero ’05 (Business Administration), also lives in Charlotte and is excited to share in their joy.

Michael Truskoski ’07 (Civil Engineering) and wife Hannah welcomed a baby girl.

Adam Umbarger ’09 (Software Engineering) and Alison (Springer-Wilson) Umbarger ’11 (Chemical Engineering) announce the birth of their son, Nathan Adam, born on October 31, 2016.

Cassandra Thiel ’09 (Civil Engineering) joined the faculty of New York University as assistant professor in the Department of Population Health, NYU Langone Medical Center, with a joint appointment in the NYU Wagner Graduate School of Public Service, and an affiliated appointment in the Tandon School of Engineering. Her research utilizes sustainable engineering tools such as environmental life cycle assessment and industrial ecology to improve hospitals, health care delivery, and medical waste streams.

2010s

Steven Tangney ’10 (Mechanical Engineering Technology), his wife Alyssa Tangney, and their three-year-old daughter Addison Avarie welcomed a new baby boy, Callahan Grey, to their family July 7, 2016 in Ann Arbor, Michigan.

Jacob Heck ’10 (Surveying Engineering) and Amanda Kelmer ’10 (Chemical Engineering) were married November 25, 2016 in Monroe, Michigan. Amanda spent six years working for BASF. Jacob is a geodesist for the National Geodetic Survey and a PhD candidate at Ohio State. The couple resides in Germantown, Maryland.

Kristine Guzak ’10 ’12 (Environmental Engineering) and Nick Johnson ’10 ’11 (Materials Science and Engineering) had a flannel-themed wedding on November 14, 2015 at the Frankenmuth Brewery complete with KBC beer. “We didn’t realize it at the time, but about a third of the attendees were from Michigan Tech,” the couple says. “It was so great to have a part of our Husky family there to help us celebrate.”

Jennifer Julien ’12 ’15 (Civil Engineering, Environmental Engineering) and Jonathan welcome Esrey Marlin, who was born on January 24, 2017. Thank you for the thoughtful gift, Blizzard. I have a feeling we are going to be friends for a very long time!

Alyssa (Smith) Bender ’14 ’15 (Civil Engineering) and Dylan Bender ’16 (Environmental Engineering) were married September 10, 2016 in Wisconsin Rapids, Wisconsin. They celebrated their wedding day with their favorite beer, KBC Widowmaker, and were surrounded by friends, family, and fellow Techies. The couple lives at the base of the Rockies in Great Falls, Montana, with their dog, Curly.

Tyler Leroy ’10 ’11 (Mechanical Engineering) won the Ironman Louisville—one of only 10 Ironman races in the US—with an overall time of nine hours and one minute. He is believed to be one of only nine Americans to win an Ironman this year (also the youngest to win an Ironman this year). The Ironman is a 2.4-mile swim, 112-mile bike, and a 26.2-mile run. Leroy graduated with his master’s in noise and vibration as a mechanical engineer and is working at Kohler.

Jennifer Julien ’12 ’15 (Civil Engineering, Environmental Engineering) and Jonathan welcome Esrey Marlin, who was born on January 24, 2017. Thank you for the thoughtful gift, Blizzard. I have a feeling we are going to be friends for a very long time!
In Memoriam

1943  John N. Harris
      Harold B. Vincent

1944  Guy W. Caspary

1947  Ruth V. Krupp

1948  Richard W. Henes
      Tauno B. Kilpela
      John J. Lewis

1949  Robert B. Botsford
      Oiva F. Hedberg
      Joan C. Holland
      Arthur E. Lewandowski
      James E. Muschell

1950  Dr. Norman G. Ainslie
      James L. Barbier
      Ronald R. Bekkala
      Raymond Hosking
      John H. McRae
      Glenn R. Yeakey

1951  Richard J. Heynen
      David R. Vaughn
      Larry G. Watson

1952  Richard B. Chappell
      Donald J. Smith
      John B. Tornberg

1953  Robert H. Destrampre
      George L. Schutte
      Robert W. Zeindler

1954  Lennis G. Byers
      Harry L. Taylor Jr.
      Wallace A. Techtient

1955  Harold J. Nyquist

1956  Max A. Beach
      Merrill K. Colby
      Prof. Wesley S. Harjala
      Joseph J. Koteles
      Gerald E. Kotila
      Rollo J. Krueger
      Myrna S. Marseille Cfp
      Bland H. Reynolds
      Stanley F. Shezko
      Jerome J. Sibrt

1957  Donald L. Decker
      Raymond J. Hendrikse
      Raymond L. Roe Jr. PE
      Thomas D. Shaffner
      Hubert K. Tossava

1958  G. Robert Adams
      Bayrd B. Berger
      Donald C. Johnson
      John F. Mueller
      John G. Winquist
      Donald J. Zelenka

1959  Hubert L. Bartol
      Norman J. Beauchamp
      Eugene A. Lilley
      Chalmers A.
      McGreaham PE
      James A. Mulka
      Grant Nuttall
      Sven E. Ostlund
      Arthur F. Pearce

1960  Dr. Theodore A.
      Grzelak PE
      Robert W. Kirkpatrick
      William B. Larson
      James A. Larson

1961  C. Theodore Amelse
      George D. White

1962  Peter H. Hruska
      Robert B. Rafferty
      Harbans Singh

1963  Richard A. Currier PE
      Michael M. Dyer
      William G. Rowe
      Paul R. Swanson

1964  Frank A. Wythe

1965  Anthony W. DeGroot
      Peter R. Hampton
      Albert G. Hicks
      James S. Jazdzyk
      Michel S. Le Duc
      Dale A. Zaugh

1966  Edward A. Crawford
      Barbara A. Truax

1967  Leon E. Brown
      Kenneth G. Buchanan
      Mary K. Kent
      David M. Ng
      Ronald A. Rees
      Leroy O. Sterbenz

1968  Joseph B. Schomer
      David E. Tooianen

1969  Paul D. Horn

1970  Rosemary Gembolis
      Ronald J. Putala
      Gary L. Stanley

1971  David E. Wellman

1972  Glen A. Edgar
      Thomas W.
      Edinborough
      Carol A. Svisco
      Robert J. Waltanen

1973  Andrew C. DePuydt

1974  Norman K. Dollhopf PE
      James R. Freundl
      Ross S. Hill

1975  Brian K. Lindquist
      Herold R. Oelke

1976  Jane L. Jordon
      Michael J. Jutila
      Robin S. Swartz


1978  Gordon W. Danke Jr.
      Gerald J. Jalkanen
      Paul P. Sinclair

      Merlin R. Jacobs

1980  Stephen J. Feldpausch
      Douglas A. Rajala

1981  Donald J. Holso
      David M. Lampinen

1982  Donna L. Jaaskelainen

1983  David L. Pastore
      John H. F. Wheeler

1984  Hali Burchfield

1985  Marc Colvin

1986  James E. Shilling

1987  John C. Crump

1988  David J. Schneider

1989  Stephen M. McCormick

2000  Kevin J. Herrera

2001  Timothy W. Dohrenwend

2004  Danielle S. Jones

2006  Steven H. Hafer

2009  Chris A. Anderson

2010  Nick C. Fenner

2016  John H. F. Wheeler

2017  Hali Burchfield

2018  Jaycen D. Salo
Alumni Profiles

Dan Madrid

Setting up coffee for a networking event at Ford. Recruiting students at Career Fair. Selling pickled eggs.

Giving back.

“It’s something that you can do,” says Dan Madrid, BS Computer Network and Systems Administration ’10. “It allows you to reconnect and revitalize your connection with Michigan Tech and Houghton.”

Madrid, who is an IT product manager in connected vehicle IT at Ford, began volunteering to assist with company recruiting. “When I started at Ford, I really wanted to come back and be on the other side of the table, helping recruit new people.”

That led to more volunteer opportunities. He and his wife Kaylee (Walsh) ’12 sold pickled eggs during the Great Lakes Invitational.

Madrid is working to start an official Michigan Tech alumni chapter at Ford.

And he’s working on a new endeavor that combines study abroad and internships. While the project is still in the beginning stages, Madrid is working with Ford and Michigan Tech to offer an international internship at one of Ford’s locations in India.

“This combines my work (which I love), Michigan Tech, and being able to help the students,” he says.

And staying connected to Michigan Tech is important to Madrid.

“With volunteering for alumni gatherings, you are building that network and giving back to the school,” he says. “I find it very rewarding.”

Whether selling pickled eggs, reviewing a student résumé, or meeting alumni from across the globe, Madrid says there’s always a connection with fellow graduates.

“With Huskies there is no introduction needed,” he says. “We just have that automatic connection. We are all Huskies. We are all in this together.”

Kayla Herrera

Michigan Tech has more than its fair share of engineers working in high-tech jobs. But it might come as a surprise to find a Michigan Tech humanities grad at Google.

A small fish in a big pond—that’s what being a humanities major at Michigan Tech can feel like, says Kayla Herrera.

Herrera graduated from Michigan Tech’s Department of Humanities in 2012 with a bachelor’s degree in communication, culture, and media. She also earned a minor in journalism and a certificate in writing. Even without a degree in engineering or technology, today she works for one of the most recognizable names in the tech industry.

Herrera is the head of social media for Google Play. She oversees and approves postings for Google Play that appear on Twitter, Facebook, Google+, and Tumblr.

Her advice to humanities students at Michigan Tech is to brush off any negative feedback you may receive. She also recommends choosing a versatile major and emphasizes the importance of showcasing your skills outside the classroom.

Herrera notes it was her father, a mechanical engineering alumnus from Michigan Tech, who pushed her to pursue her passion. He told her to never settle in a career and to strive for what she wanted to do in life. “He taught me to not be afraid, to never doubt myself, and to keep trying, no matter what.”

“When you sit in a job interview and you can talk extensively and passionately about what you are doing or want to do, you’ve found your passion,” she says.

While her career options appear limitless, each day Herrera brings her passion to the social media platforms of Google Play.

In August, she and Steve Green ’14 will be married in Chicago. Green is a sound designer for Giant Squid Studios in California and last year worked on the video game ABZÛ. He’s working on his second game that he designed sound for, What Remains of Edith Finch, releasing soon.
“Good fortune is only a loan. Pass it on.”
-Rudy ’62 ’63 and Judy Shunta


Many ways to give. One goal. Help our students create the future.
mtu.edu/supporthuskies
Track ice movement. Study ecosystems. Detect pollution.

This is Michigan Tech’s Innovation Shore.
Learning more about acoustic properties underwater and under ice helps electrical engineer Zhaohui Wang build communication networks with sound. The sensors she uses not only relay data, but also learn and adapt to their environment. Her research will improve how we monitor the Great Lakes and ocean ecosystems.

mtu.edu/innovation