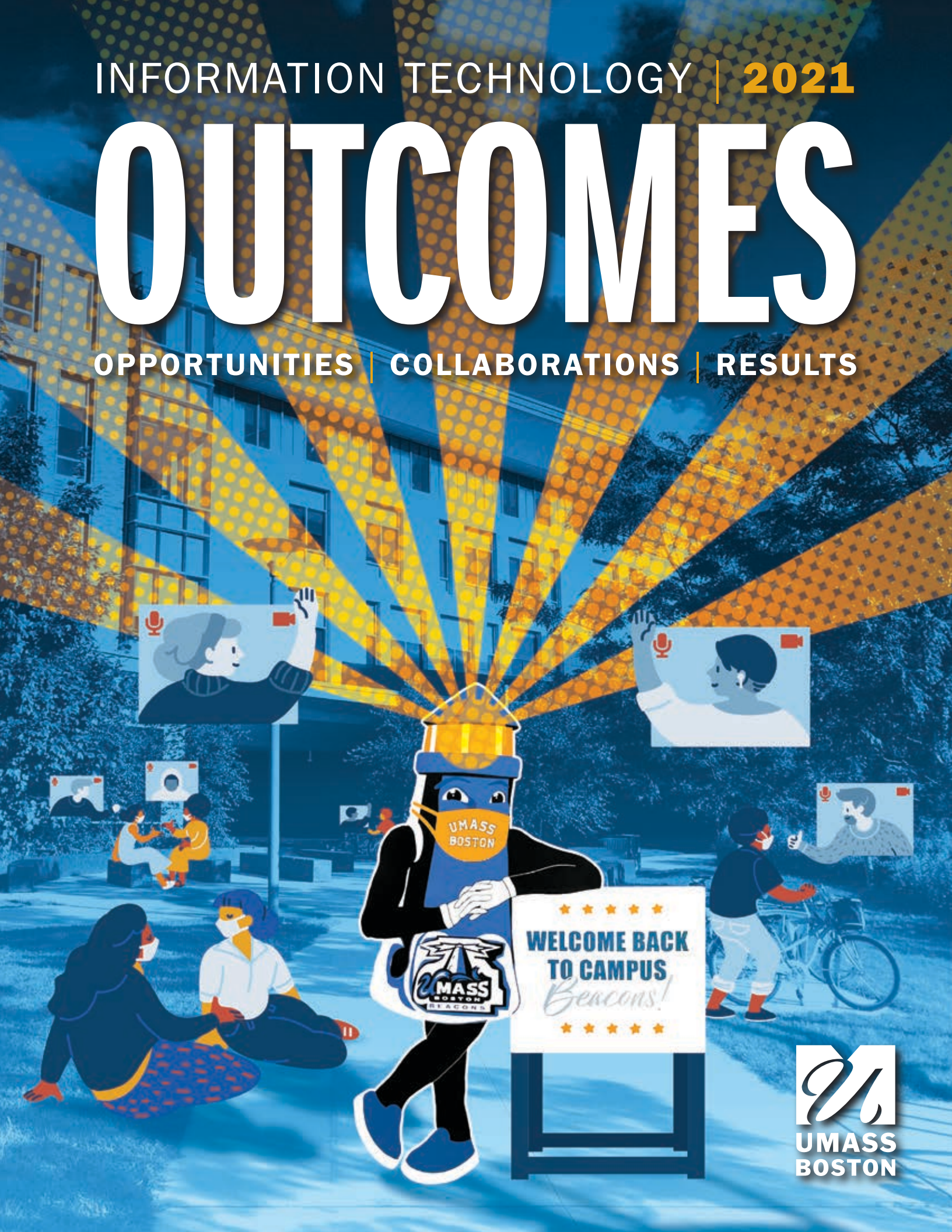


INFORMATION TECHNOLOGY | 2021

# OUTCOMES

OPPORTUNITIES | COLLABORATIONS | RESULTS





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OPPORTUNITIES | COLLABORATIONS | RESULTS

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## In Memoriam

We would like to dedicate the 2021 edition of IT Outcomes to the memory of our colleague Jonathan Crawford, who passed away this year. You are missed by all your friends in the IT Department.

## INFORMATION TECHNOLOGY OUTCOMES | 2021

*Information Technology Outcomes (IT Outcomes)* is a magazine highlighting the many collaborations between IT and members of the UMass Boston community.

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## Welcome Back—On-Campus or Remote!

Welcome back Beacons! No really, welcome back to campus after nearly a year and a half of teaching, learning, and working remotely. 2020 may have been the year of “Operation Divide & Conquer” brought on by COVID-19, but 2021 has been the year of “unITy.”

We closed out 2020 with tangible results as described in last year’s IT Outcomes—Mission, Vision, and Values, Strategic Plan, Technology Roadmap, Project Portfolio, Learn IT, and Review IT being among them—and ushered in 2021 with the theme of “unITy”—a time for all of us to pull together, support each other and simply do our best.

Well, 2021 has been a remarkable year with many twists and turns along the way. Summer 2021 saw the return to campus for staff across the board, while faculty and students came back to in-person teaching and learning for the Fall semester. Upon returning, the entire UMass Boston community saw how through “unITy” and resiliency the IT team rose to the occasion, not only keeping the lights on throughout



**Raymond Lefebvre**  
*Vice Chancellor and CIO*

2021 but exceeding expectations and achieving what can only be called amazing results.

This publication captures the essence of “unITy” we experienced in 2021 and every story makes me beam with pride. As we look ahead and aspire to a year of normalcy and simplicity in 2022, we can see in these pages the ways in which people, process, and technology intersected to improve the lives of students, faculty, and staff. I truly hope that you enjoy every story as much as the UMass Boston IT team has enjoyed—through “unITy”—being a trusted partner in advancing the UMass Boston mission. We are committed to

establishing even greater trust in IT in 2022 as we strive to achieve our vision through continuous improvement focused on “SimplicITy”.

Welcome back Beacons!



# Saving Three Semesters

## *eLearning Excels in Fully Remote Classes*

It was March 2020 when it first became apparent that the COVID-19 pandemic would have a meteoric impact on virtually every aspect of American public and private life, and the education sector was impacted at least as hard as any. From elementary to higher education the challenges that administrators, faculty and students had to confront in this new reality were staggering, and UMass Boston was no different. If there was one advantage that UMass Boston had that perhaps some other universities lacked, it was that its Information Technology department knew it had to step up and take a leading role in how the university adapted to an unprecedented situation, especially when the decision was made that all in-person classes had to be transitioned to a remote delivery format on a moment's notice.

Suddenly, nearly 1,000 faculty members were forced to switch from the in-person teaching they had done for their entire careers to teaching with an online/remote format, and understandably they needed a lot of help. The eLearning and Instructional Design team came to the rescue with remarkable speed, especially considering how little advance notice there was and how quickly they had to act before class time was lost. The team immediately started assisting faculty adapt their courses to fit a remote modality and help them prepare to teach using new technologies.

“Our entire team worked directly with faculty either individually or in groups meeting with them online, nonstop from nine in the morning until five at night,” said Paula Thorsland, Manager of the eLearning and Instructional Design Team.

The team worked from when the university shut down in March 2020 all the way to the end of the Fall 2020 semester to assist faculty with the shift to online teaching. But in the beginning, when the transition had to happen as fast as pos-

sible, the team immediately worked to implement the Zoom application so it could be used throughout the university. This effort was led by John Jessoe, Director of Classroom Technology and AV Services. Of course, Zoom had been in use at UMass Boston prior to the pandemic, but the need for it to be available throughout the school curriculum created a major undertaking. Fortunately, Jessoe's group was up to the challenge, and its success in this area allowed the school's course schedule to continue with remarkably minimal impact.

Another critical piece of UMass Boston's pandemic instructional response was making the Blackboard learning management system more universally accessible across the entire

curriculum. As with Zoom, Blackboard was in use at UMass Boston in March 2020 but only by about half of the faculty and when the pandemic hit, what was once a technological option became a remote teaching and learning necessity. Blackboard became essential in almost every class for turning in assignments, running discussions, administering tests, making announcements, and distributing syllabi. And again, it was the eLearning and Instructional Support Team, managed by Thorsland, that facilitated the usage of Blackboard by that segment of the faculty that hadn't done so before. In addition to that the team introduced other helpful technological tools to the mix, including an auto-enroll system for students and a live Zoom transcription feature. There was also an investment in a program called HonorLock, which maintains academic integrity and prevents faculty from having to proctor exams over Zoom.

Finally, knowing that faculty would continue to need tech support, the team created virtual drop-in hours to mimic the setting of in-person office visits. These virtual office hours provided faculty with just-in-time support for any IT related



**“Rather than faculty having to hear information from four or five different channels, we made it our goal to come together to speak with one voice.”**

—Apurva Mehta, Associate CIO

issues, as well as further eLearning training and one-on-one consultations. The drop-in hours were conducted via Zoom and staffed by the eLearning team, as well as by Lauren Luis and Zack Ronald.

So, thanks to the IT department and an amazingly talented and adaptable student body and faculty, the curriculum of the Spring 2020 semester was completed in its entirety. But the folks in IT knew there wasn't any time to bask in their accomplishments. To roll-out the Fall 2020 semester in a smooth and organized way, Teach Fall 2020 was created. Apurva Mehta, Associate CIO, as well as representatives from the Office of Faculty Development, the Center for Innovative Teaching, and the Academic Technology Committee joined forces to create virtual listening sessions, workshops, and programs for faculty beginning in the summer of 2020. Teach Fall 2020 soon morphed into Teach Spring and Summer '21 to continue to provide faculty with the support they needed.

“Rather than faculty having to hear information from four or five different channels, we made it our goal to come together to

speak with one voice,” said Mehta. “We wanted to streamline our messaging and find out what the faculty needed and wanted.”

The hard work and dedication of the eLearning and Instructional Support team did not go unnoticed by UMass Boston's leaders.

“I'm so proud of the ethic of care, the ethic of responsibility, the smarts, the ingenuity, the creativity with which you've all stepped up to create solutions so that we could continue our work via this different medium,” said Chancellor Marcelo Suárez-Orozco at a Teach Spring '21 session. “And you did all of this on behalf of our students, and I'm so grateful for that.”

“What I've seen from all of you and your wonderful colleagues throughout the University of Massachusetts Boston is the ability not just to pivot, but to embrace the challenge, to transcend the immediate hardships and stress and to work together to make sure that our students have the opportunity to learn and to grow and to thrive,” said Provost Joseph Berger at the same “Teach” session.

# Student Support in the Virtual Classroom

## *Virtual Digital Assistants*

All things considered, the transition from in-person lecture hall teaching to virtual classroom teaching went as smoothly as could be expected for UMass Boston faculty in Spring 2020, when the pandemic's impact was first being felt on campus. Yet when the Fall 2020 semester arrived, conversations with faculty convinced the Educational Technology & Learning Commons team that more help was needed, and a plan was quickly put in place to provide faculty with that assistance.

Specifically, the TEACH Fall 2020 team learned that faculty teaching large classes (75+ students) were facing challenges managing both technology and remote pedagogy. To address this issue, a plan to hire four graduate students as Virtual Digital Assistants (VDA) was devised by the eLearning & Instructional Support team and led by Irene Yukhananov, the university's Digital Initiatives Lead. The program was funded through the Coronavirus Aid, Relief, and Economic Security (CARES) Act.

After sifting through more than 70 applications, Yukhananov selected four graduate students of diverse disciplines to work as VDAs, and the program began early in the Spring 2021 semester. Emma Byrne, Kati Albert, Sara Harland, and Julie Krzanowski were pre-assigned to certain faculty or randomly assigned to courses to aid faculty with many of Zoom's more advanced features, all while ensuring that students could have access to the live meeting and Zoom bombers were kept at bay.

"My VDA skillfully monitored the Zoom waiting room, launched polls, set up breakout rooms when needed, and relayed questions and comments from the Zoom chat," responded one faculty member to a survey regarding the VDA pilot. "She was exceptional in every way."

The VDAs also helped behind the scenes by working individually with faculty to assist them with Blackboard, setting up academic integrity programs such as Turnitin and Respondus Lockdown Browser, and uploading Zoom class recordings to the cloud.

"With the VDA program, I felt that my teaching and class facilitation was greatly improved as compared to last fall, as I



did not have the same anxiety over technical issues," responded another faculty member.

This project was the result of a collaboration between many employees in the Educational Technology & Learning Commons team. Irene Yukhananov was encouraged by Paula Thorsland, the Manager of the eLearning Instructional Design Team, to take the lead on the project. Yukhananov also praised John Jessoe, the Director of Classroom Technology and AV services, and two of his staffers, Zack Ronald and Lauren Luis, as "instrumental in supporting this project."

Also included in this edition of IT Outcomes is the story (see page 11) of the introduction of BeaconFlex at UMass Boston. BeaconFlex is an innovative system of teaching and learning that will allow students in a limited number of Fall 2021 courses to choose between attending the class in person, or remotely via web conferencing. VDAs had a lot to do with the successful implementation of the BeaconFlex system. "BeaconFlex really wouldn't be possible without the VDA program," said Apurva Mehta, Associate CIO of IT Services.

# Pronto Instant Messaging Software

## *A Quicker Way to Collaborate*

Move over Discord, so long Slack. Students have a new way to chat! With the instant messaging application Pronto, students at UMass Boston are now able to communicate with their professors and classmates in a manner less formal and more convenient than email. The best part? Pronto seamlessly integrates with the Blackboard learning management system, making it so faculty can set up discussions among their entire class without students having to give each other their personal information.

Pronto can be accessed through Blackboard itself, and by downloading the Pronto app. Students and faculty can send chats to the entire class or send direct messages to each other. As a bonus, the Blackboard integration also allows for groups set up on Blackboard to auto-populate on Pronto, allowing students to collaborate more easily on group assignments.

According to Apurva Mehta, IT's Associate CIO, Pronto was piloted in the Spring 2021 semester. "When we had our listening sessions with our faculty members to see how the Fall 2020 semester went, student engagement was one of their top concerns," said Mehta. After Pronto was piloted in the Spring 2021 semester, its usefulness in combating the lack of student engagement and its popularity among faculty quickly became evident.

"Pronto has been useful, engaging, and fun!" wrote biology lecturer Karla Schallies. "It mimics normal text messaging communication, and it also allows me to reply by creating a thread,

adding pictures, and animated GIFs." Pronto also allows users to tag other users in the chat, react to messages, and send emojis; all things that students are used to in modern messaging apps.

Economics professor Andrew Perumal valued Pronto for the application's ability to communicate quickly and clearly with students. "I post copies of announcements in Pronto so I know that each student got the notification. I can track students' viewing of the announcement," wrote Perumal.

The piloting of Pronto was a group effort by Zack Ronald, the university's Classroom Technology Innovation Coordinator, and Theresa Miller, who works with faculty in the eLearning department. Miller created instructional materials regarding the setup of Pronto for faculty, and her hard work was not lost on those professors involved in the pilot.

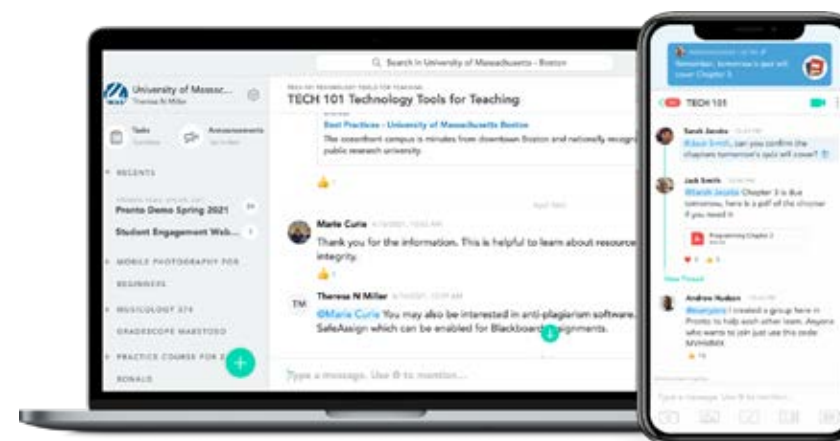
"The setup of Pronto in Blackboard and on my phone was a breeze," wrote Katherine Hatzis, a senior lecturer of business communications.

Throughout the remote spring semester, Pronto was able to bring students and faculty together in a time where social interaction was more difficult than ever. However, Pronto's benefits extend beyond remote courses, and thus, Pronto became available to any faculty member who decides to adopt it effective August 2021.

"It's one of those tools that came to us because of COVID-19, but I can see a bright future for it well beyond that," said Ronald.

**"It mimics normal text messaging communication, and it also allows me to reply by creating a thread, adding pictures, and animated GIFs."**

—Karla Schallies, Biology Lecturer



When is the homework due again?

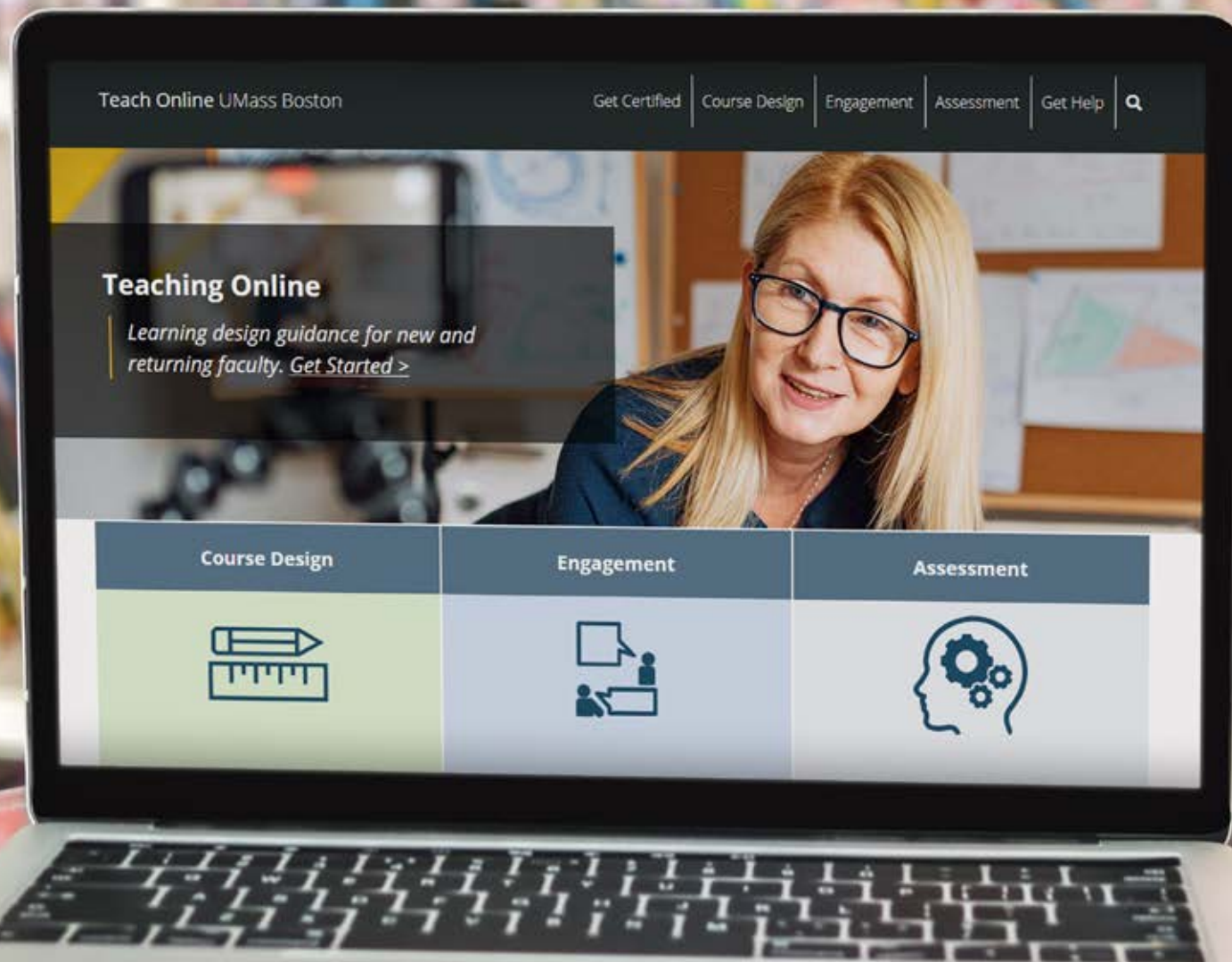
Tomorrow at midnight on Blackboard!

Thank you! 🌟



# UMB Goes Online and Crushes It

[teachonline.umb.edu](https://teachonline.umb.edu)



Over the past several years, online courses and degree programs have been achieving more and more popularity. Today, most institutions offer programs in both online and on-campus modalities, UMass Boston included. The university began offering online courses in the mid-2000s, and in 2018, hired Mya Mangawang as Vice Provost for Strategic Initiatives, to aid in the growth of the university's online programs and tap into the global marketplace.

Initially, Mangawang worked with the Web Services team to build the student facing "Online" website ([online.umb.edu](https://online.umb.edu)). The site brought together all online programs and courses under one umbrella. This website made it easier for students to enroll in online courses, however, to grow the number of programs, it proved necessary to develop a robust training program for faculty to teach online. As the training program developed, it was decided that a site dedicated to teaching online should be built; and thus, [teachonline.umb.edu](https://teachonline.umb.edu) was born.

For faculty, teaching a fully online course can present a unique set of challenges. With [teachonline.umb.edu](https://teachonline.umb.edu), UMass Boston's best practices for teaching online are all located in one place. The site provides faculty with online course design guidance, all while providing the university with a way to promote the adoption of teaching an online course to faculty members.

"In designing the site architecture, we had to decide what would best serve the needs of the end users, in this case the faculty, in regard to how they research, how they learn, and how they're going to be able to better teach their students," said

Lisa Berelson, Senior Web Designer and Developer and a leader on this project.

In addition to aiding faculty in online course design, the site also makes information regarding teaching a fully online course available to everyone in the UMass Boston community. So, those who are curious about teaching a fully online course can always visit the site. The site also reinforces the university's high standards for teaching online courses at UMass Boston.

In working on this project, Berelson consulted with other members of the Web Services team, including Director of IT Web Services Jim Wyse, and team members Kevin Gerich and

Peter Tattlebaum. On the other side of this project is the content; enter the eLearning and instructional design team, specifically Rrezarta Hyseni, Senior Instructional Designer and eLearning representative on the project. Apurva Mehta, Associate CIO, provided feedback and oversaw the project.

"I would say just the number of people involved in bringing this project to fruition has been one of the highlights," said Mehta. "Lisa and the Web Team, Rrezarta and the eLearning team, and

the Provost Office all came together."

The site is mobile-friendly, responsive, and accessible to those who have visual or hearing impairments. At the time of writing, it is set to be live and ready for use at the beginning of the Fall 2021 semester.

"I think the site is a way for us to broadcast our message about best practices, course design, engagement, assessment, and accessibility, all in one easy-to-use site," said Hyseni.

**"I think the site is a way for us to broadcast our message about best practices, course design, engagement, assessment, and accessibility, all in one easy-to-use site."**

*—Rrezarta Hyseni, Senior Instructional Designer and eLearning Representative*



# Course Registration Becomes an Amazon Experience!

## Summer Courses Shopping Cart Project

One of the most fundamental operations at the heart of every university is that which allows for enrolled and prospective students to register for classes. In a significant way it creates a strong first impression for these students to see how well the university operates and functions. And as recently as a few years ago, course registration was a clunky and outdated experience for UMass Boston students. To put it more simply, it was inefficient and there was a lot to be improved upon.

Fortunately, the Information Technology web services team recognized that upgrades were needed for the university to have a true, state of the art course registration system. So, with little delay and with the help of the Marketing and Engagement team, the Registrar's Office, UITS, and the Continuing and Professional Studies (CAPS) department, work on the project began. The end result: two sister websites—online.umb.edu and umb.edu/summer—that make registering for online and intersession courses much easier and more efficient than before. The new, clear-cut process of course registration has been improved even further by the subsequent

addition of a shopping cart feature on the umb.edu/summer site. "It's a tremendous improvement over the past shopping cart user experience we had before," said Linda Modiste, Assistant Vice Chancellor for Application Services.

Previously, even after UMass Boston had digitized its course registration processes, students attempting to sign up for classes often enrolled with the blind hope that their chosen course wouldn't be full. The new system now provides data regarding availability of course seats in real time, so if a class is full, a student no longer has to wait days to know. In addition to providing real time course data, both sites contain a filter feature, course descriptions, costs, and are mobile friendly.

Students also used to have to endure the tedious process of selecting one class, registering, and then starting the entire process again for each additional class. Now, students who wish to register for more than one course at a time are immersed in an "Amazon experience." Web developers Lisa Link and Kevin Gerich paved the way for this shopping cart functionality and check-out experience with Amazon and other e-commerce sites in mind. So far, over 1500 course registrations have been made using the improved system.

Despite an overflow of requests from the registrar's office and IT emergency requests due to the pandemic, the project was still able to be executed. "The fact that this happened at all is a testament to everyone's collaborative spirit, patience, and can-do attitude," said Jonathan Lee, Executive Director of Marketing at the university. Lee was quick to credit Katie Brenton – the university's Associate Director of Technical Marketing – who led the shopping cart and summer courses project.

The proof of the new system's success is, as they say, in the pudding. Though enrollments at public higher education institutions across the state dropped as the pandemic raged on, UMass Boston saw a 200% increase in submissions for the 2021 Summer session. Certainly, UMass Boston's tremendous course offerings had a lot to do with that, but even the best courses need a great way to register for them. What a great collaboration this project was, resulting in a huge win for the whole campus community!



# IT Helps University 'Get IT'

## Getting Technology to those Who Need IT

What happens when hundreds of UMass Boston employees find themselves working from home unexpectedly? After news of the COVID-19 pandemic hit, for many this meant realizing they did not have the technology needed to perform their jobs and meet the needs of students, faculty, and staff.

Enter the "Technology Loaner Program"—aptly titled the "Get IT" program—intended to provide faculty and staff with the information technology equipment necessary to teach, work, and learn remotely throughout the COVID-19 pandemic.

Through the "Get IT" technology loaner program, IT Services was able to help keep UMass Boston up and running after the unforeseen announcement that the remainder of the Spring 2020 semester would be held remotely. IT rose to the occasion to meet the immediate needs of faculty and staff for the Spring semester, and by the Fall of 2020, the technology loaner program was expanded and rebranded as "Get IT," so that faculty and staff could borrow the equipment necessary to keep UMass Boston functional during a global pandemic.

In addition to loaning out laptops, the "Get IT" program has also provided brand new desktop computers, external monitors, headsets, microphones, and webcams to 500+ members of the UMass Boston faculty and staff.

Along with expansion of the larger "Get IT" program came the development of an accompanying equipment reservation system. Binh Ly, a developer inside of the Managed Services (formerly Lab Operations) team, took the lead on creating a program that facilitated equipment requests from faculty and staff. Interested parties were able to login with single sign-on credentials and select the equipment they needed from IT Services' available inventory. The request system would then automate a property pass, which is the paperwork needed when equipment goes off-site, and open a service ticket. Then, Desktop Services team members arranged appointments so individuals could pick up the equipment they ordered curbside in a safe and secure manner.

At the time of this writing, the loaner equipment utilized in the "Get IT" program is being converted to become permanent replacements as part of the university's Computer Replacement Program. To continue to meet the need for loaner equipment,



IT Services is leveraging funds awarded to UMass Boston as part of the Coronavirus Aid, Relief, and Economic Security (CARES) act.

"We received a final round of CARES Act funding at the end of the fiscal year," said Michael Lyons, Assistant Vice Chancellor of IT Client Services, and the lead on the "Get IT" project. "So, we're converting a lot of Academic Affairs staff and faculty from standard desktop computers to laptops with docking stations to provide the flexibility of working on or off campus."

Lyons also cited Quan Nguyen, Manager of IT Desktop Services, and his team as instrumental in conducting the preparatory work for the "Get IT" program, and the Client Services team for their efforts on the project overall.

"Different departments inside of IT came together, and different departments inside of the university came together to meet the needs of faculty and staff so that our students could continue their education," said Lyons.

Fortunately, the "Get IT" program will continue beyond the era of fully remote working, teaching, and learning at UMass Boston.

"It's long-term planning," said Lyons. "We've proven to ourselves that we can support IT business continuity amidst a global pandemic and going forward, the 'Get IT' technology loaner program has laid the foundation for a modern and flexible workplace of the future."



# Microsoft Teams & Teams Rooms

## *A New Level of Collaboration*

Even before the pandemic forced all work at UMass Boston to be done remotely in March 2020, Associate CIO Apurva Mehta wanted to find a way for people to collaborate that improved upon simply using email, in-person meetings, and file shares. Fast forward to remote operations brought on by COVID-19 and collaboration was largely limited to e-mail, and even that was mostly used to see when colleagues were available for virtual meetings. The tools available campus-wide were inefficient and limited productivity. Mehta knew that there had to be a better way.

So, late in 2019 Mehta approached Ray Lefebvre, Vice Chancellor and CIO of Information Technology Services, and suggested that the department adopt a relatively new platform offered by Microsoft called Microsoft Teams. Mehta noted that as a “collaboration and communication tool,” Microsoft Teams offered several advantages, the most significant of which being how it combined all the important features people rely on into one program. Teams includes calendaring, file sharing, chat, and video conferencing features— to name a few—all in one powerful package. Collaboration would seldom require anything else. It also didn’t hurt that Microsoft Teams was integrated into the Office 365 package the school already got from Microsoft, so there was no extra charge for it.

Lefebvre agreed with Mehta and approved rolling out Microsoft Teams at UMass Boston campus wide. Microsoft offered valuable assistance, including a grant that allowed a team to come out to UMass Boston to help with training and implementation. Things were moving along nicely until Spring 2020, when as Mehta said, “the project had to be put on the back burner due to COVID-19.” But the folks in IT were encouraged by what they saw and by September 2020 things again kicked into high gear. Lisa Moriarty was assigned as project manager and a goal was set to have Microsoft Teams completely up and running across campus by June 30, 2021.

The new deadline stepped up the pressure a bit, but the Teams’ team answered the call. A soft launch of sorts was held and allowed Lefebvre and others on the IT staff to get practice using Teams, and it was obvious to everyone how useful a tool it would be. The chat and file sharing features were great, but the video

conferencing made it the complete package. Zoom was being used for that, but the feeling was it was more suited to be a virtual classroom tool. For administrative work and group projects Microsoft Teams quickly became the popular choice.

Teams went fully live by the summer of 2021, bringing us to the second part of this story. The next generation of Microsoft Teams is called Microsoft Teams Rooms, and since Teams was such a success the IT team decided to install Teams Rooms too. The concept behind Microsoft Teams Rooms is that it turns a suitable room on campus into a physical location to host in-person and virtual meetings simultaneously with the simple click of a button. Microsoft provided A-V equipment specifications to outfit two rooms, and UMass Boston selected the Bayside IT conference room and the McCormick 3rd-floor conference room to be pilot Microsoft Teams rooms. Work on the Teams Rooms was completed in time for the start of the Fall 2021 semester with plans to share lessons learned with other departments across campus as the pilot unfolds.

Bringing Microsoft Teams and Microsoft Teams Rooms to UMass Boston is just another example of how the Information Technology Department is pursuing opportunities to make the university more connected, efficient, and productive through a whole new level of collaboration.



# BeaconFlex Expands the Classroom

## *Hybrid Teaching & Learning in the COVID-19 Era*

Whoever first said that “Necessity is the mother of invention” would no doubt have been very impressed by HyFlex. Developed on the West Coast after the COVID-19 pandemic created the need for innovative teaching and learning systems, HyFlex is a flexible instructional modality that allows faculty to teach an in-person class to students on campus while simultaneously streaming the same content via Zoom or a similar application to students off-campus. It’s been enthusiastically received since its introduction at UMass Boston, where it has been affectionately named “BeaconFlex” by the chancellor. Fifteen classes were selected by the Provost’s Office to be taught in this modality for the Fall 2021 semester.

During the Spring 2021 semester, BeaconFlex was pilot tested in two classrooms in University Hall. Faculty member Helen Poynton, an Associate Professor in the School for the Environment and pilot participant, responded to a survey by writing, “in terms of what worked well, it did feel like teaching in person! It had that atmosphere which I have missed a lot. I also felt that it was possible to engage equally with students online through chat and with the students in the class.”

Seeing BeaconFlex in action, one can’t help but be amazed by the technology and see what an ingenious innovation it really is. The classroom equipment includes tracking cameras which follow the instructor around the room, different types of microphones which pick up the students in the classroom, and dual monitors so faculty can simultaneously view the gallery of students attending their class remotely and the materials they are displaying to the class. Document cameras were also installed in the classrooms so faculty could annotate and write

notes on a surface they can display to both their remote and in-person students.

Four classrooms were outfitted for the Fall 2021 semester with the advanced audiovisual technology necessary for BeaconFlex to be utilized. John Jessoe, Director of Classroom Technology and AV Services, and Zack Ronald, Echo360 Administrator and Academic Technology Specialist, installed this equipment with the aid of Jeff Wade, Chief Audio-Visual Engineer. Jessoe and Ronald also built portable units to quickly move the equipment between classrooms.

Faculty members were trained in how to use the classroom technology by Zack Ronald, and how to teach a BeaconFlex class by Rrezarta Hyseni, Senior Instructional Designer. As part of the Spring pilot, Hyseni met with faculty prior to their class sessions to train them in best practices for the modality. A training program was also offered in the Fall 2021 semester, and BeaconFlex classes include regular evaluation by both faculty and students to ensure that students who attend class remotely have a similar experience as those who attend class in person.

Some of the faculty involved in the original Spring pilot were so excited about the program that they have opted to teach using the BeaconFlex modality again. Suha Ballout, an Assistant Professor in the Department of Nursing, wrote in a survey saying, “I want to be part of this modality irrespective of COVID-19. It is important to feel that I am providing opportunity for students to participate in class irrespective of their circumstances. Educational equity and diversity of delivery are paramount to our students and to meeting our mission at UMass Boston in light of our focus on restorative justice.”







# Technovation Tales

## Virtual Reality 5K Running and Photo Exhibits

**T**echnology can bring innovation to our lives but its role in a large institution must be regimented for it to be fully utilized. Sometimes this comes at the expense of further, more serendipitous innovations that may otherwise arise. “Technovation” (technology + innovation) is a strategy to bring back some of those free-forming serendipitous connections. It’s a concept that challenges IT staff to identify a problem, and with pure creative brainstorming, find solutions that might be possible through cross-team collaboration and unconventional thinking.

Technovation takes place in a technology innovation incubator, or “technovator” for short. In the technovator, IT staff use both high-tech and low-tech tools to collaborate on problem solving. Though there was no physical technovator this past year, that certainly did not stop the IT staff from “technovating.” When COVID-19 forced the world to work remotely, the Technovation team saw an opportunity to solve their own space problem and discovered a virtual collaboration online environment called Frame VR. This tool let the team—made up of a dynamic volunteer group of IT staff—collaborate virtually on their first project.

Think of Frame VR as a combination of the collaboration voice and video functionality of Zoom, combined with the virtual presence available from online video games. Team members customized their 3D “avatar,” selected a virtual space to meet, and were able to use chat, video, virtual whiteboards, and photo uploading to interact with each other in this new digital world.

While Frame VR was a great help to the Technovation team, they saw its potential to help others in the university and applied those ideas to the effort. The team tried out many use-cases but

with experimentation being what it is, the concepts didn’t always pan out. One was for a virtual help desk that proved unfeasible. But as all good scientists understand, success can be cloaked in failure.

“Technovation is failing forward. So, if something doesn’t work, it’s okay, because we’re learning from that experience and taking another step forward,” said Zack Ronald, who is also a core member of the Technovation team. The team is also made up of Lisa Link, Senior Web Designer/Developer, John Mazzarella, interim Assistant Vice Chancellor for IT Client Services, Jouliana Bosneva, Instructional Designer, and Matt McCubbin, IT Accessibility Coordinator. Also, on the team and heavily involved in the creative aspects of the Frame projects are student employees Donna Kimmel, Abhinav Bountra, and Ssam Samidinov.

Two Technovation projects that had great success were the Krystle Campbell Marathon Memorial, and the IT Student Photo Project.

### Krystle Campbell Marathon Frame and the IT Virtual 5K

This past April 2021 the Technovation team created a Frame to help University Advancement promote the Krystle Campbell Scholarship fundraiser and the accompanying virtual 5K. John Mazzarella created a virtual roadway graphic in the space leading the viewer through a gallery of past fundraiser photos, and Donna Kimmel found a 360 photo of the Boston skyline for atmosphere. Abhinav Bountra thought a photo exhibit would enhance the project and made valuable technical contributions in implementing it. Heather

Brigham, Director of College Engagement for University Advancement and Alumni Engagement, suggested the addition of photos of runners from previous Marathons and a tribute photo of Krystle Campbell, a UMass Boston alumnus who tragically lost her life in the 2013 Boston Marathon bombings.

Zack Ronald had the idea for the Technovation team to participate in the 5K as a group, and John Mazzarella extended the challenge to the entire IT department. All told, 24 people associated with IT, including student employees, and friends and family of IT members, participated in the 5K and raised \$400 for the cause.

“It’s no coincidence that when we used the Frame to promote the 5K that it raised more funds than it had in the past,” said Brigham.

Due to the success of this year’s 5K, the university hosted a hybrid in-person and virtual 5K in October 2021.

### Student Photo Art Gallery Project Frames

For the past seven years, the IT Student Photo Project has been a way for IT student employees to document the ways technology impacted their lives as UMass Boston students, with project photographs exhibited in the atrium and hallways outside the computer labs in the upper level of Healey Library.

When COVID-19 hit, the Technovation team worked over the summer to build a virtual art exhibit and held a gallery opening in Frame in September 2020. This unique event was attended by staff, students and alumni alike. Lisa Link, Donna Kimmel, Abhinav Bountra, and Ssam Samidinov created a virtual exhibit

to showcase seven years of student photography, 3D models and innovative spaces, such as a Makerspace, and showing it within the Frame in true Technovation style. Then, along with student intern Eleanor Mouzafarov, the team worked to create a second gallery event in Spring 2021. Its theme was personal reflections on the remote learning experience during COVID-19, entitled “UMB Enclosed.” This not only garnered more traffic, but also positive responses from representatives of the company that makes Frame VR.

But even after this creative success, the Technovation team stayed inspired by the spirit of innovation. When it was discovered that Frame is not properly accessible to blind people, the team found a way to ensure that all users are included using a companion blog. On it, every aspect of every Frame is described and uploaded to the site, which can be presented in an accessible manner for participants who are blind or have limited vision.

With Frame, there are unlimited possibilities for what anyone involved in the university can do in their area of interest. Students and faculty teaching and learning in a hybrid modality are likely to find this meeting space refreshing after spending too much time in traditional tools like Zoom. The athletics department is already interested in using Frame, and another Frame has recently been created for the university’s Student Leadership Awards event.

“There are so many bright minds in IT,” said Ronald. “When you bring everybody in a room together to collaborate, it’s not just breaking down silos, it’s making everybody feel like they’re part of a team.”



## Women in IT

In 1980, Jimmy Carter was the first US president to designate the week of March 8th as National Women's History Week. Seven years later Congress passed a law pronouncing March "Women's History Month."

In recognition of this, Salina Allen-Sharpp, Executive Assistant to the Vice Chancellor for IT and CIO, created the Women in IT (WIT) virtual luncheon for those who work in IT at UMass Boston.

"There are a lot of women in IT who don't get to shine, or who we don't see or know," said Allen-Sharpp. "IT is a predominantly male field, but we have a lot of women in the background who do some phenomenal things but may not be as recognized as some of the men."

The luncheon was held over Zoom every month and was a relaxed space for the women of IT to check in with each other

## Diversity Inclusion Potluck Social

As UMass Boston began its first fully remote semester in the Fall of 2020, the Office of Diversity, Equity, and Inclusion searched for events to sponsor across the university. One idea that caught their eye came from Salina Allen-Sharpp, Executive Assistant to the Vice Chancellor for IT and CIO. Allen-Sharpp pitched the Diversity Inclusion Potluck Social, or "DIPS," to celebrate UMass Boston's remarkable diversity.

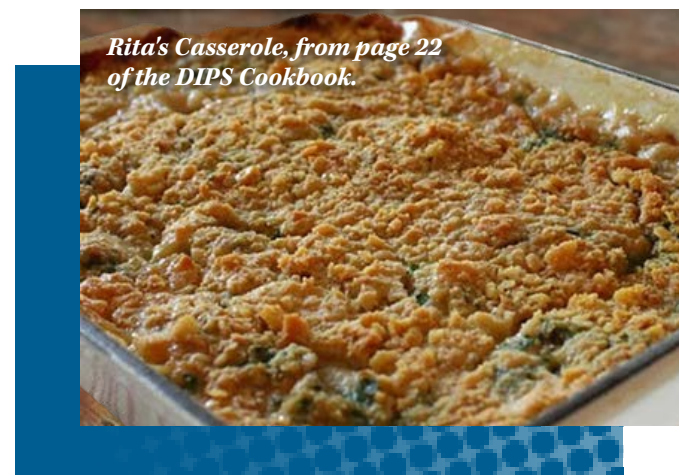
October marks Global Diversity Month, and as UMass Boston boasts one of the nation's highest rates of diversity among its student body, DIPS was scheduled and hosted on October 26th, 2020. Participation was via Zoom and attendees were encouraged to share recipes they enjoyed, though a recipe wasn't needed to take part. All were welcome to listen and learn about the recipes that were featured and their cultural significance.

"The thing about food is that it brings people together," said Allen-Sharpp. "It breaks down barriers, and it's also an opportunity for people to get to know other people."

and share stories about their lives during the months of isolation caused by the pandemic. Tips were shared, questions were answered, and the group shared some "possip," a term coined by Shani Dowell who founded a firm of the same name by combining the words "positive" and "gossip."

"The luncheon was really about keeping the women in IT connected," said Allen-Sharpp.

Nowadays, it is not difficult to find women who have made a career in Information Technology, or many other stereotypically male fields for that matter. The IT department wants to recognize and thank the women who make this department so great, and specifically Salina Allen-Sharpp for organizing the Women in IT virtual luncheons.



The idea behind DIPS was to share different cultures and traditions through food. Following the event, Allen-Sharpp created the DIPS Cookbook using the event's recipes, photos, and stories. There were photos of each dish and stories written by the people who shared them.

Mary Ryan shared not only her empanada recipe, but the importance of the dish to her family. "My family lived in Santiago, Chile for a number of years before I was born while my father served in the US Navy. When they returned to South Boston, they brought with them a love of Chile, its people, culture, and food."

The DIPS event and book was an amazing showcase of the richness present in our campus community and the importance of diversity, equity, and inclusion.

## Aira

### *Helping the Vision Impaired to See*

For people who are blind or have low vision, navigating life on a university campus can be quite challenging. Throw in a global pandemic with its social distancing and other regulations, and the task becomes even harder. Enter Aira: a "visual interpreting" app and service introduced to UMass Boston in 2021. With Aira, a professional agent looks through a user's smartphone camera at their surroundings and helps to guide them through the area.

"It really is like having a friend in your pocket who can help you in different situations," explained Michael Lyons, Assistant Vice Chancellor of Client Services. Aira can help students, faculty, and staff in social distancing, reading COVID-19-related signage (which are often not written in braille), ordering food, navigating new pathways on campus, avoiding construction areas, managing online materials, and more.

UMass Boston staff have worked to customize Aira to fit the needs of the campus community. The "geofence" boundaries in which the app works extend not only around campus, but also to the surrounding areas. The geofence covers the main campus buildings, parking lots, walking paths, the Bay-side building, the Residence Halls, the HarborWalk Path, athletic fields, the Peninsula and Harbor Point apartments, the JFK/UMass T station, the JFK Presidential Library, the EMK Institute, and more. And that's just the geofence surrounding UMass Boston's campus. The service has been extended to the university's partner schools and covers all the Mass Bay Community College and Cape Cod Community College locations, as well as the Nantucket site for UMass Boston.

Matt McCubbin, IT Accessibility Coordinator, partnered with Lyons to take the lead on implementing this service. McCubbin mentioned the support of Joyce Morgan, the Director of the Ross Center for Disability Services, Lori Sullivan, a Compensation and Benefits Analyst for the Human Resources Department, and Jennifer Bose from the Institute for Community Inclusion, as essential in putting this service into place. McCubbin also discussed how expanding accessibility is one of IT's core goals.

"Ray Lefebvre, our CIO, has really taken an interest in accessibility and promoting accessibility-related services and enhancements on our campus, and we've gotten a huge amount of support on this service and other related projects," said McCubbin.





## Network Upgrades

UMass Boston can function at the highest level only if its faculty, staff, and students have a computer network that works as well as they do. So, the university is planning a complete, campus-wide network upgrade. A more secure wired and wireless network will be designed and installed, leading to greater availability across the campus. It will also be easier to maintain and have much higher bandwidth for its users.

The Network Services group headed up by Jamie Soule and the IT Project Management group led by Terry Phalen have teamed up to tackle this gargantuan project. The project management side works to ensure that the project stays on task, on schedule, and doesn't go over budget, while the Network Services team works to design the new network and maintain the univer-



sity's current one. The Project Manager for the network upgrade is Sheri Ryder, a member of Phalen's team, and Neil Rosenberg, Assistant Vice Chancellor of Business Operations in IT, acts as the procurement liaison to vendor WEL. However, work on the upgrade extends beyond just the IT staff. The Unified Procurement Services Team and the university's Budget Office have also played a critical role in the project.

"Our campus network is mission critical to all campus operations and we in the Network Services Team take tremendous pride in delivering a reliable and future state next generation network for all users on campus," said Soule. At the conclusion of this project, the hope is that everyone can be more productive than ever without having to know all the hard work that went into it.

## World Class Research Gets IT Support

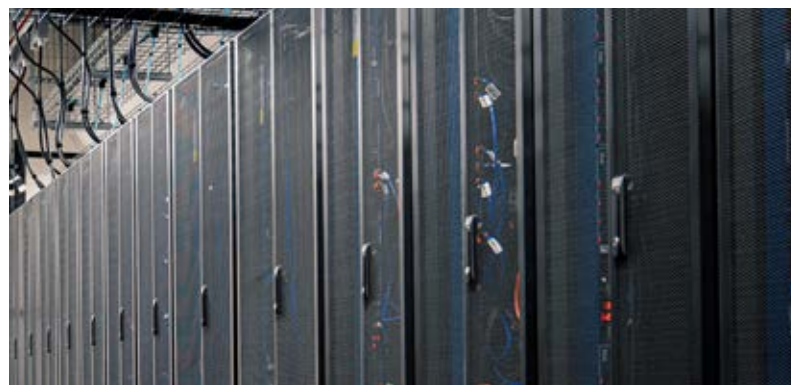
As Boston's only public research university, having the proper equipment and services to conduct research is essential to UMass Boston's operation. That is why the university's Research Computing department provides high performance computing (HPC), specialized storage and software, analytical applications, and other related services. According to Jeff Dusenberry, Director of Research Computing, the department also acts as a liaison between researchers and IT, providing consultation for networking, equipment specification and purchasing, data security, risk mitigation, and more.

On the HPC front, Research Computing has made some recent upgrades to provide the best research experience to the university's dedicated Principal Investigators (PIs). In March 2021, Dusenberry and Runcong Chen, Research Computing Associate, made upgrades to the Chimera cluster, including replacing the 8-year-old head node and several older computer nodes as well as adding several new nodes.

Prior to these upgrades, the hardware in use at UMass Boston HPC facilities couldn't support cutting-edge applications that were being requested by PIs. Computationally intensive research

can now be completed with the most up-to-date technology. The upgrades also provided researchers with machines containing roughly 20 times the memory of a regular 32 GB laptop. That's a lot more memory for people who need it to efficiently conduct their research. Following these upgrades, the usage of the Chimera cluster increased, indicating improved productivity.

As part of an initiative to increase awareness, utilization, and appropriateness of research computing services, the Department has formed a Research Computing Advisory Committee, with representation from almost all the schools and colleges at UMass Boston. Efforts are currently underway to improve research computing services to disciplines that are not traditional HPC users.



## Campus Center Ballroom Upgrades

*Classic Elegance Made Digital*

OK, so it's not a "ballroom" in the way that word is typically used. It hasn't held any events in which people dressed in formal wear could be seen gracefully gliding across a dance floor with an orchestra playing in the background. But it could if someone wanted it to. In fact, there are few rooms in Greater Boston that could host an event for up to 600 people as elegantly as the UMass Boston Campus Center Ballroom.

It's always been gorgeous, ever since it was constructed as part of the Campus Center in 2005. With two stories, 20-foot-high ceilings and 8,100-square-feet of event space, the Campus Center Ballroom has the capacity to host indoor events of any magnitude. One far wall facing the outside is made entirely of glass and has a breathtaking view of the Boston skyline. It's truly spectacular.

However, after 15 years the Campus Center Ballroom was in need of upgrades, especially its AV system. The room's audio-visual system had become what AV Services Director John Jessoe called "antiquated," and no longer capable of delivering the high-quality sound and visuals today's audiences and events demand. So, Jessoe and Chief Audio-Visual Engineer Jeff Wade went to work bringing the AV up to date.

This wasn't a tweak here, a tweak there type of job. The existing AV system was analog, so a fully digital system had to be added from scratch. Both Jessoe and Wade deserve a lot of credit for taking on this complex project, but after it was completed no one (especially John and Jeff) would say the effort was not completely worth it. The capabilities of the newly upgraded Campus Center Ballroom are nothing short of extraordinary, including key improvements for those with audio and visual impairments.

Three 16-foot flat screens allow people in each of the room's three sections to see activity in any area of the entire

room, while the room can also be cordoned off for three separate events as required. Strategically installed microphones and cameras can be directed to capture sights and sounds wherever they're needed. Newly installed 85" TV Monitors in the rear of the room will be a great visual aid for presenters. A person with an ordinary laptop can walk into the ballroom and, after a couple of quick network connections, make a presentation to hundreds of people. But perhaps the most outstanding new feature, and the one that qualifies the system as state-of-the-art, is the capability to allow events in the room to be seen live by remote audiences anywhere.

It is this last bit that got Jeff Wade's eyes twinkling. "Pushing a few buttons allows the room to convert from presentation mode to production mode and turns it into a full-fledged TV studio." It allows the room to hold high profile events that people are interested in outside the UMass Boston campus—way, way outside campus. Events of great demand can be streamed live on YouTube, Facebook Live, and other similar platforms. Imagine an upcoming event you are witnessing in the UMass Boston Campus Center Ballroom being seen in real time on the other side of the planet. Actually such an event—the second annual Black Lives Matter Day—was hosted in the upgraded Campus Center Ballroom in November 2021. It included panel discussions, keynote speakers, breakout sessions, etc., and the Zoom webinar of the event was broadcast to participants at far off locations.

So, it's safe to say that the newly upgraded UMass Boston Campus Center Ballroom can host a ball, a fundraiser, or any other event effectively and efficiently now, and well into the future.



# Self Service Portal and Knowledge Base

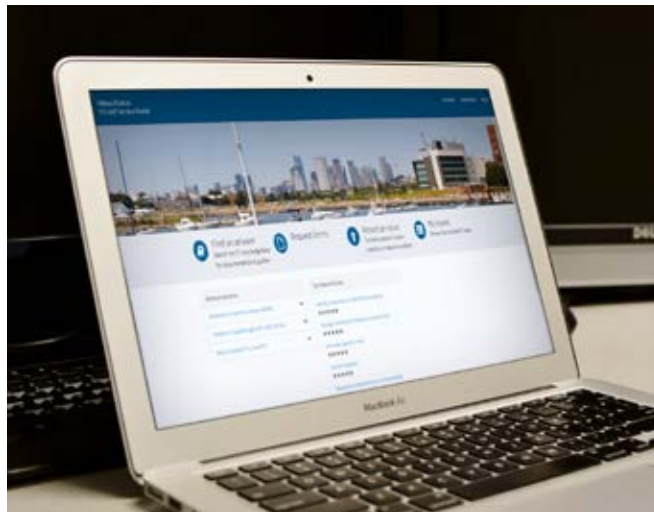
## *A Gateway to Tech Solutions*

Looking for help with a technological problem? Well, thanks to the recent introduction of a brand-new UMass Boston IT Self Service portal, the solution is near! The IT Self Service portal and Knowledge Base (<https://umassboston.service-now.com/sp>) allows you, the client, to find the assistance you need to address commonly occurring information technology issues with a few simple clicks.

With the IT Self Service portal, email, chat, or phone calls are no longer the only ways to get IT assistance. Beginning in March 2021, individuals at UMass Boston have been able to leverage the knowledge base, enter their own issues to create a ticket, track the status of their ticket while it's open, and then again after it's been closed, all through the new IT Self Service portal. The portal acts as a central hub in which clients can see all the correspondence that has been done regarding their issue(s).

"People like to see everything that's been done on their ticket," said Michael Lyons, Assistant Vice Chancellor of IT Client Services and lead on this project. "This provides a way to monitor open items and review previous tickets, which was much more difficult before."

The IT Self Service portal is not only a vessel for transparency among clients and the staff who work on their tickets, it also comes with an extensive knowledge base which attempts to aid clients in solving their issue before they even need to enter a ticket. The knowledge base allows clients to type their question into a search bar and directs them to recommendations for helpful articles related to the issue they're looking to solve. The service also enables internal agents to communicate with a client regarding how their issue was solved. The internal agents can send links



**"This provides a way to monitor open items and review previous tickets, which was much more difficult before."**

*—Michael Lyons, Assistant Vice Chancellor of IT Client Services*

to knowledge base articles previously used to solve known issues so that those experiencing similar issues can quickly, through self-service, address their own issue in a timely manner.

"The best ticket for us is the ticket that doesn't get entered, because people find the answer that they need to solve their problem," said Lyons.

Now that the IT Self Service portal has been launched, expansion of the ServiceNow IT service management platform (ITSM) to areas outside of IT is underway. Such areas include the IT Support Team for Student Affairs, Athletics, and the Academic Affairs Central Business Unit.

Tom Miller, Assistant Vice Chancellor for Academic Affairs and Financial Services and head of the Central Business Unit for Academic Affairs, has found great success in utilizing the ServiceNow ITSM platform to track support issues, workloads, and performance metrics. At the time of writing, Miller is excited to integrate the IT Self Service portal piece of ServiceNow into his team's technological structure.

The creation of the IT Self Service portal was a collaborative effort between the IT Service Desk team and other departments within IT Services. Lyons spoke to the contributions of Peter Adams, Supervisor of the IT

Service Desk, Jeeva Arthur, the lead database developer for ServiceNow, Linda Modiste, the Assistant Vice Chancellor of Application Services, Tom McClennan, a Business Systems Analyst, Jim Wyse, Director of IT Web Services, and John Mazzarella, interim Assistant Vice Chancellor of IT Client Services.

"The IT Self Service portal and Knowledge Base will improve IT service delivery, and it's something we are excited to build off of as we go forward," said Lyons.

# Secure IT

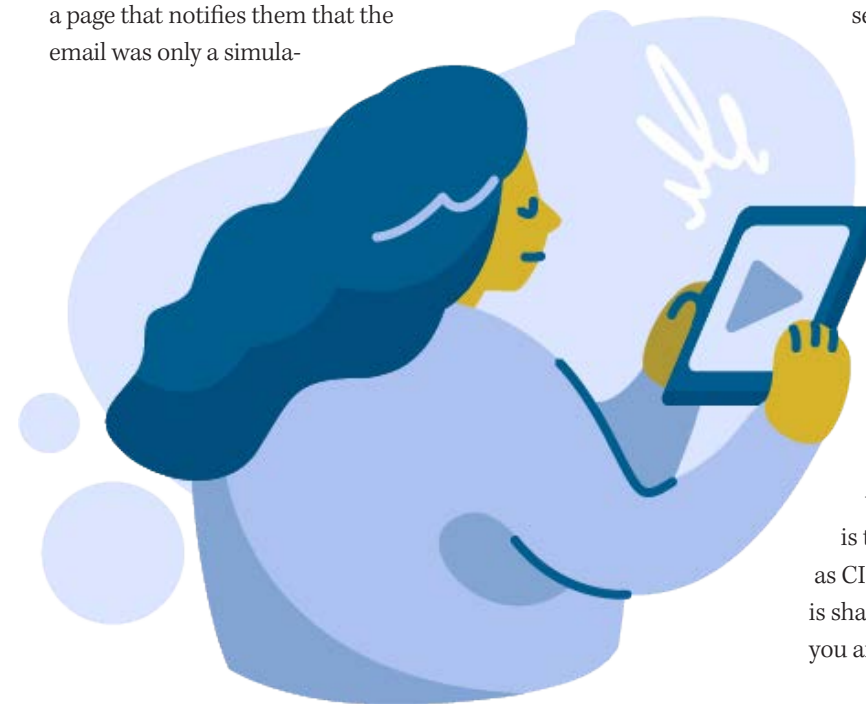
## *Cybersecurity in a Zero Trust World*

One of the constants in the computer age has been the continuing need to protect sensitive and valuable information from cyber criminals. That's why at UMass Boston, cybersecurity is an ongoing effort covering an entire spectrum of threats. With the university's Secure IT initiative and newly licensed Microsoft A5 program, staff, faculty, and students can feel more confident that their personal information is as safe as possible.

Secure IT went live in 2021. The Secure IT education program works to put the power back into the hands of everyone by preparing them to identify online threats.

"We use Secure IT to train people to become part of the solution, rather than becoming part of the problem," said Wil Khouri, the university's Chief Information Security Officer (CISO).

The main components of the Secure IT training program are AwareEd and PhishSim. Each month, AwareEd requires UMass Boston employees to view short training videos on issues related to cybersecurity and then take a short quiz reviewing the material. As its name suggests, PhishSim educates employees by sending them simulated phishing emails that urge users to click a link. If the link is clicked, the user is brought to a page that notifies them that the email was only a simula-



tion. However, the page highlights the fact that if the email were a real phishing attack that the user would lose their information to scam artists or hackers. Employees who fail to recognize the email as a simulated phishing attempt are required to have extra training on phishing.

The university's ongoing cybersecurity efforts got another boost from the acquisition of a Microsoft A5 license—a major upgrade from the previous A3 license. A5 provides a complete set of automated cybersecurity tools for visibility into threats through analysis of user's behavioral patterns. The system can identify impossible travel along with other abnormal activity and quickly alert the proper individuals as soon as such behavior is identified. A5 also brings all the cybersecurity tools together in one ecosystem. Rather than having to look at individual tools or multiple consoles, the information security team can more easily manage threats through the A5 threat monitoring system. The system can discern major threats from minimal ones and then focus on the larger threats. Also, when Zoom, Microsoft Teams, and other programs were added to the university's Microsoft 365 (M365) package, A5 was able to provide the extra security necessary to secure operation of these programs.

"A5 gave us more power and more tools to monitor all the other applications in M365," said Khouri.

During the return to campus following COVID-19, these cybersecurity tools became increasingly important. Bad actors were able to read into the anxiety many individuals faced with the transition back to campus and attempt to phish users for medical or other protected information.

Khouri works with Alison Murray, Senior Information Security Specialist, and David Bonczar, Senior Information Security Architect, to maintain a safe and secure campus environment. However, Khouri believes the protection of data extends beyond his team. "Security is the job of every individual," said Khouri. "It's not only my job as CISO to protect everyone, no—security is a responsibility that is shared by everyone. It brings us all together, because as long as you are secure, we are secure."



# New UMass Boston Mobile App

*For Students, By Students*

It's not news to say that most college students rely on their phones for a lot of their daily activities. The UMass Boston IT department has known this for a long time, which is why about six years ago some forward-thinking people in IT realized that the university needed a mobile app of its own and set about making their vision a reality.

With just a modest amount of funding Linda Modiste, Assistant Vice Chancellor for IT Application Services, got the ball rolling by contacting our mobile app vendor, Modo Labs of Cambridge, MA. Working with Modo allowed a team led by Director of IT Web Services Jim Wyse and IT Project Manager Lisa Moriarty to perform its high-tech magic and begin piecing the app together. Developing a mobile app is very different and a more specialized process than creating a website, but Jim and Lisa's team quickly got the app online and available to UMass Boston's very tech-savvy student body.

When the UMass Boston mobile app was first introduced it was, as Wyse admits, "static," meaning it couldn't easily be updated with new functionality. So, it was a very positive development when Michael Metzger, Special Assistant to the Vice Chancellor



of Student Affairs, entered the scene. Michael described what a mobile app means to students by saying, "It is a world that they live in," and notes that since the UMass Boston website must serve the school's entire constituency, it's critical that the mobile app focus on the unique needs of current students. It is that philosophy that has driven the mobile app's development since.

When the COVID-19 pandemic shifted the campus to remote learning in Spring 2020, Ray Lefebvre, Vice Chancellor and CIO, realized that students might need the mobile app now more than ever. He invited Metzger and the Marketing and Engagement team to work with Wyse and Moriarty to create a new version of the mobile app—designed by students, for students. And with the support of Student Affairs, Marketing, and the IT front office, Jim realized "we had to up our game," and make, as Michael put it, "a new student-centered version of what the mobile app could be." So, the team embarked on creating what was called version 2.0.

Metzger and Moriarty arranged student-focused user group meetings and gathered information to be eventually used for the new mobile app. Wyse, using a process he calls "progressive enhancement," makes sure the mobile app's existing features are continually fine-tuned to ensure optimum functionality. The next stage is deciding what new features would be most useful and planning the next series of upgrades.

Yet as Metzger describes, there is more to a university's mobile app than just usefulness. Having a mobile app signifies something about an institution. Call it status if you like, but there is now an expectation among students and other affiliated persons that a modern, urban research university should have a modern and useful mobile app. They are also marketing tools and are very helpful for an institution to present its self-image to the public, or perhaps to prospective new students.

But whatever purpose the new UMass Boston Mobile App serves, students, faculty, and staff can know that it will be technologically state-of-the-art and meet our students' needs as well as any mobile app can, because it will always be designed by students, for students.

## STAR PERFORMERS



# Apprenticeships that Matter

*PACE Students Serving the Community*

At UMass Boston, teaching students the skills necessary to help them start their careers is essential. That's why in 2020, the university initiated the Professional Apprenticeship and Career Experience (PACE) program. PACE is a subset of student employment which allows students to gain job skills they can take with them after they graduate.

"We have taken student employment positions, and where it fits, elevated those positions to have a professional or career-related component," said Amy Weinstein, Director of the PACE program. The career-related component comes in two steps. First, each apprentice is assigned a mentor for their position and then they must complete a one credit career development course.

IT is proud to have had fifteen PACE apprentices work in our department in 2021 and would like them to be recognized. Janna Septembre, Van Pham, Tung Duong, Sayed (Abu) Chowdhury, Alejandro Chaparro, Yensis Pena, Allison Gross, Jake Bates, Kibru Dessie, Michael Khouri, Kyle Bonnyman, Manuelo Tanjay, Dhairya Patel, Daniel Vautour and David Martinez not only helped themselves in their future professional endeavors, they also served the entire UMass Boston community with dedication and distinction. Space considerations prevent us from

telling you more about each of these worthy individuals, but in highlighting a few of them we hope you can consider the contributions of the entire group.

Janna Septembre worked as a Web Assistant under Lisa Berelson, Senior Web Designer/Developer in IT, throughout the Spring and Fall 2021 semesters. Septembre is a Communication major and is in her senior year at UMass Boston. Her career goals include working in Integrated Marketing Communications and Strategic Communications fields.

Van Pham worked as a Research Computing Apprentice under Jeff Dusenberry, Director of Research Computing, throughout the Spring and Fall 2021 semesters. Pham is an Information Technology major in the College of Management with a concentration in Business Intelligence. His Spring apprenticeship poster details a pilot stimulus-response application for researchers in the Psychology department.

Sayed (Abu) Chowdhury worked as a Network Engineer under Scott Gilbert, Senior Network Engineer, throughout the Spring and Fall 2021 semesters. Chowdhury is a Computer Technology and Information Technology major who believes his time as a PACE apprentice will lead him to many career opportunities in the field of IT.

Yensis Pena worked as a Website Analytics & Production apprentice under Lisa Link, Senior Web Designer/Developer, throughout the Spring and Fall 2021 semesters. Pena is a 3rd year Biology major who worked to convert the IT Outcomes 2020 magazine into a webpage. His career goal is to become a software engineer, and he appreciates the experience his PACE apprenticeship gave him in this field.

Allison Gross worked as a Graphic Designer under John Mazzarella, interim Assistant Vice Chancellor for IT Client Services, throughout the Spring and Fall 2021 semesters. Gross is an Art major who worked to create visuals for internal IT communications for the MiViVa (mission, vision, values) project, as well as in the role of Layout Designer for the IT Outcomes 2020 and 2021 magazines. Her career goals include working in the Graphic Design field as well as self-publishing short-story graphic novels.

Michael Khouri worked as an Information Security Analyst under Alison Murray, Senior Information Security Specialist, during the Spring 2021 semester. Khouri is an Information Technology major with a concentration in Computer Forensics, who worked to automate the renewal process of expired online SSL certificates.



# Recreation Fit for the Modern Era

## *Fusion Recreation Management Software*

Historically, UMass Boston's recreation services have been managed through manual, time-intensive processes. Many day-to-day operations of the campus gym and their various classes were conducted using homemade Excel spreadsheets. However, with the implementation of Fusion Recreation Management Software, UMass Boston's recreation management systems have been brought to a whole new level.

Fusion is a two-part system according to Andrew Castagna, manager of Recreational Programming and Member Services.

The member-facing side is an online portal where students, faculty, and staff can select their yearly memberships, register for programs and events, and view events happening in all of UMass Boston's recreation facilities, all accessible by UMass Boston's single sign-on system.

The other side of Fusion is internal but will provide benefits to recreation facilities users as well. With Fusion, users can now tap their BeaconCard to enter facilities, and recreation staff can easily and accurately keep track of equipment



checkout and facility reservations. The recreation center's payment system has also been overhauled to reflect a more secure payment environment.

A new point of sale system has been added for in-person sales made with credit cards, as opposed to the old method of needing to pay by check, and an online component allows users to pay for fitness and certification programs as well as merchandise right from their computers or smartphones.

Like many Information Technology (IT) projects, the implementation of Fusion was a team effort across many areas at UMass Boston. Lisa Moriarty, a Project Manager from the IT department, highlighted how Fusion allows recreation staff to track how many people are using the facilities. Mary Ryan, a Data Integration Specialist under the PMO office, aided in the IT department's collaboration, along with Human Resources, student data custodians, the UMass Boston treasurer's office, and the BeaconCard office which assisted in the integration of the "tap-in" system.

John Pagliarulo, the Associate Athletics Director for Recreation, spoke to the collaboration he saw between his department, IT, and all the others. "I can't say enough about how professional and helpful Lisa Moriarty was," said Pagliarulo. "We couldn't have done it without her, that's for sure."

As of the time of this writing, UMass Boston's recreation facilities haven't been open for nearly a year and a half due to COVID-19, but Fusion's impact has already been felt. The recreation center held a virtual walking event for faculty and staff along with two virtual 5Ks for the university community, and as Pagliarulo put it, "Fusion was critical in terms of getting people to register for those programs."

Fusion will also be playing a role in recreation's reopening in Fall 2021. Its touchless ordering capabilities will help with social distancing, and a workout time slot reservation component will enforce maximum capacity limits should COVID-19 restrictions be put into place again.

When asked about his collaboration with IT, Pagliarulo said, "I think it was an extremely tremendous and positive experience."

# The Journey of 100 Chromebooks

## *Empowering Students Through Technology*

They say that "A journey of a hundred Chromebooks begins with a single creative solution." OK, no one has actually said that, but it does describe a recent occurrence at UMass Boston. It came in the form of 100 Chromebook laptops which had been purchased by IT for use at an upcoming New Student Orientation event. However, when COVID-19 struck and campus remained locked down much longer than expected, student orientation was instead held remotely, and the Chromebooks were at risk of sitting unneeded and unused.

Yet this seeming setback presented an opportunity for a creative solution through other interoffice partnerships on-campus. Mike Lyons, Assistant Vice Chancellor of Client Services, explained that his team quickly realized that Chromebooks could be used in many different ways to meet the needs of students at UMass Boston while also being less expensive than other options.

Through the work of some creative individuals, alternate use cases were found for the Chromebooks to be shared with different offices. Twenty-five units were provided to University Health Services, who are using them for COVID-19 testing stations around campus. Twenty were provided to the Campus Center and 25 more went to the Library, to update each of their student laptop loaner programs. Finally, 30 units were held in reserve for the following year's student orientation, where the Chromebooks were rolled out in socially distanced locations for students to complete orientation exercises.

IT has partnered with the library in the recent past to share a tracking system for their semester-long technology loaner program to staff (read more about Get IT on page 9). The cross-departmental partnership is not new though, and the dispersion of Chromebooks to different departments led to an expansion of the loaner program.

Mary Moser, UMass Boston's Advancement and Engagement Librarian, explained how the library was able to upgrade their student laptop loaner program with the Chromebooks. Originally, students were only permitted to check out a laptop for an hour at a time, but now they will be able to check them out for 24 hours for use on campus, and even take them home

to do schoolwork off campus. "We're excited to be able to begin loaning them for the Fall!" said Moser.

Peter Bonitatibus, Director of Student Affairs Technology Services (SATS), acted as an ally to IT by getting yet more departments to adopt the usage of Chromebooks. "The SATS Office needed to find a portable solution to provide remote access to key Student Affairs cloud functions." So, Bonitatibus obtained a test device from Lyons and found the Chromebooks could meet that need. They also could connect and function as a remote mobile device for New Students and Family Programs orientations and connect to two key University Health Services cloud applications. Bonitatibus was excited to report that, "It was a complete success. The collaboration between our two areas provided vital services to students and student success."

We'll end this story with another relevant quote (this time a real one) from Lao Tzu, "Life is a series of natural and spontaneous changes. Don't resist them—that only creates sorrow. Let reality be reality. Let things flow naturally forward in whatever way they like."





# SimCapture Cloud Migration

## Bringing the Nursing Lab Home

The opening story in IT Outcomes 2020 described the launch of a state-of-the-art “Nursing Simulation Lab,” a space containing lifelike, computerized mannequins used by nursing students to get hands-on experience performing healthcare procedures. One of the Sim Lab’s student-friendly features is called “SimCapture,” which sends a video stream of lab activities to be viewed by faculty and students for evaluation. It quickly became a very valuable tool for everyone in the nursing program that used it.

Yet like many campus-related good things in 2020, a problem arose when COVID-19 struck the school and in-person classes had to be suspended. That was when the nursing students sent home to take remote classes made the disappointing discovery that SimCapture was only viewable on-campus.

IT and Nursing staff scrambled to set up an interim solution using Zoom and other technologies while a longer-term fix could be planned. Eventually, Rosemary Samia, Director for Clinical Education & Research in the School of Nursing, Mike Lyons, Assistant Vice Chancellor of Client Services, and Zack Ronald, Echo360 Administrator and Academic Technology Specialist, decided to make the transition to the Cloud. “Zack Ronald has always been a very big advocate and support to the lab,” said Samia of Ronald’s contributions. With the transition to the Cloud, students and faculty could access the service from home.



Samia worked with many different groups in IT to complete the migration to the Cloud while keeping the nursing simulation lab in service. Lyons filled in as a temporary Sim Lab technician. He worked with Terence Phalen, Director of IT Project Management, and David Gorfine, the IT Project Manager for the job, to communicate with the vendor to perform upgrades to the lab. Samia also worked with Wil Khouri, Assistant Vice Chancellor and CISO, to ensure the security of SimCapture’s data in the Cloud. David Bonczar, Senior Information Security Architect, the Network Services team, and the Desktop Services team also worked to ensure security for this project.

The migration to the Cloud was completed in 2021. Students are now able to access SimCapture from home via an app, with a bonus of being able to get at-home practice on a “modular skills trainer” device, a portable unit that students can use from home to check their nursing competency skills.

Because SimCapture is hosted in the Cloud, all the students’ practice data is synced with the course for the appropriate faculty to view. According to Samia, this integration will be able to improve students’ learning experiences. “We’re looking forward to being able to identify some trends about repetition for skill attainment and retention,” said Samia. “It is bringing together clinical instructors with their students.”

“This is really cutting-edge technology in the nursing space,” Phalen was excited to add, “and so this is really a big deal to have this type of technology available for nursing students. There’s not a lot of labs like this in the country!”



### Blackboard Migration to the Cloud

In life, you can’t have the ups without the downs. For UMass Boston’s online course management system Blackboard, this meant you couldn’t run upgrades without downtime. The work needed to keep Blackboard updated had to be done regularly, but the problem was it required a few days of taking the system offline. Most recently this occurred this past winter, but the good news is it won’t happen again.

In Winter 2020 following months of planning, the IT staff migrated Blackboard to the cloud. Blackboard will now undergo smaller instant upgrades, rather than the large updates that required extended downtime.

“For a long time, we were a year or two behind the most updated version of Blackboard,” said Paula Thorsland, Manager of eLearning and Instructional Support. “Migrating to the cloud allows us to operate in the most updated version of Blackboard at all times.”

In addition to this constant flow of updates to Blackboard, the migration to the cloud also provides other benefits. Blackboard is expected to become more responsive and accessible for students and faculty, and because updates will be implemented more quickly, data security will increase too.

And if you think these improvements must be costly to the school, guess again. Migrating to the cloud also makes Blackboard less expensive to use than before!

### Learn IT

At many universities, or organizations of any kind, there is often a stated commitment to the professional development of its employees. But many of these organizations fall short of that commitment or just don’t deliver what they promise.

Not so for the Information Technology (IT) department at UMass Boston. Starting with the arrival of Ray Lefebvre as Vice Chancellor and CIO of Information Technology Services in June 2019, the department has made an extraordinary commitment to the professional development of its staff. Lefebvre quickly directed an effort to create professional development opportunities for everyone in the IT department.

Professional development was offered in IT before Lefebvre arrived, but it was a very ineffective system that seldom resulted in requests being granted. That changed however with the

### Chosen Names

The names people are given at birth become deeply personal to them, and on occasion a person will have a desire to change theirs. UMass Boston believes that all students, staff, and faculty have the right to represent their identities as they choose, so a collaborative team from multiple campus units recently initiated the “Chosen Names” project. Students can now update their records at UMass Boston, and make a name change, by adding a chosen name into WISER on the school website.

No explanations are required. As University Registrar Valerie Corrente explained, “No one should have to explain why they want this change. I don’t need to know that information and the IT people don’t need to know.” The Chosen Names project is part of a larger ongoing initiative within the UMass System to address instances of misgendering trans and non-binary students and be more inclusive of gender and sexual identities.

Student Affairs, the Office of Diversity, Equity, and Inclusion, Academic Affairs, the Registrar’s Office, Enrollment Management, and of course IT, were all involved in this project. “I think this is a really good example of breaking down silos in a way that either establishes processes or streamlines them, so that students aren’t bounced from office to office to get the same result but through different people,” said Andrea Maccone, Special Assistant to the Assistant Chancellor for Diversity, Equity, and Inclusion.

Visit [umb.edu/name](http://umb.edu/name) for more information.

creation of the Learn IT website, and suddenly professional development in IT took the proverbial quantum leap forward. At [blogs.umb.edu/learnit](http://blogs.umb.edu/learnit), IT staff can find numerous options for not only refining their current job skills but also ways to jump-start them on their chosen career paths. And the staff not only has options, but they are also strongly encouraged to pursue them. Prominently featured on the website is the Learn IT+ 8-hour Challenge. As its name suggests, the program invites IT staff to use eight hours a month of their work schedule to pursue whatever professional development opportunities they desire. No questions asked.

When asked why he believed professional development was so important, Vice Chancellor Lefebvre replied, “Information Technology professionals need the opportunity to receive professional development on an ongoing basis. Investing in professional development equates to investing in people, and to that end everyone deserves the opportunity to learn and grow.”



## IT SERVICES DIVISION—MISSION, VISION, VALUES

### INFORMATION TECHNOLOGY SERVICES MISSION STATEMENT

Information Technology Services (ITS) provides a diverse population of students, faculty, and staff with reliable and secure technology, services, and solutions to continuously improve scholarship; teaching and learning; research; and business processes to enhance student success and support the mission of the university.

### VISION STATEMENT

To be a trusted partner in providing secure, transformative, and innovative Information Technology services to advance teaching, learning, research, and administrative practices through dynamic and adaptive customer service.

### STATEMENT OF VALUES

Information Technology is committed to the values of:

- **Caring** – We interact with students, faculty, and staff with respect, empathy, and professionalism.
- **Inclusion** – We embrace our differences to provide the best service to a diverse UMass Boston community.
- **Innovation** – We value creativity and critical thinking, focusing on developing efficient, effective technology services and solutions.
- **Collaboration** – We work together to implement new services and technologies to solve problems and improve the quality of life for all.
- **Dedication** – We are committed to the mission of the university and the people we serve, and we work hard to ensure successful outcomes.
- **Excellence** – We strive to provide high-quality service and support to our community of students, faculty, and staff.