Ratliff’s love of solving tech mysteries on Help Desk earns Employee of Year honor

Brian Ratliff was tricked into receiving MTSU's Technical Service Employee of the Year award in person by being asked to do what he loves—provide tech help.

Ratliff has worked 15 years on the ITD Help Desk and said the honor just came from doing what he does best.

“This is just what I do daily,” Ratliff said. “I guess I was just put on this earth to help people. I think I’ve found my niche… There is a new problem every day, so it’s not mundane.

“I like the problems no one can resolve—the hard ones that others can’t figure out and they come to me.”

See Ratliff on page 12

Immersive tech makes impressive debut

It’s fun to spend some time playing Fruit Ninja on your smartphone. It’s quite another to flinch as you swing Samurai swords at realistic produce flying at your head.

And more seriously—it’s one thing to read a news article or watch a TV report about a fatal domestic violence case. It’s quite another to be standing in the middle of the incident as it escalates all around you.

“We’re after creating the stories, because storytelling is really the thread that connects our college—that’s what we all do between Recording Industry, Media Arts and Journalism—what we’re trying to do is tell better stories,” said John Merchant, associate professor in the Recording Industry department.

Merchant and Stephanie Dean, assistant professor of Media Arts, want to offer virtual reality experiences to the MTSU community and, in doing so, create a real-life program for teaching how to make them.

See Virtual Reality on page 10
University laptop computers to be encrypted in phased-in process

ITD has begun encrypting University laptop computers, but the process will be a gradual one designed not to interrupt usage by faculty and staff.

Encryption provides an additional layer of protection against cyber-criminals by locking down the actual hard drive. That way, if a computer is stolen the hard drive couldn’t be removed and accessed, said Alan Franklin, ITD director of Client Services.

“If it’s not encrypted, a thief can pull it out and put it in another device and read it,” he said. “Encryption isn’t just locking the door, it’s putting it in a steel cage and locking it.”

Franklin said the process will involve gradually encrypting laptops during the academic rotation period, when faculty and staff get upgrades or new equipment on a scheduled basis. Others will be encrypted on a case-by-case basis as ITD comes in contact with a user’s laptop.

Aaron Schmuhl, Director of Information Security Services, said the only thing the user of an encrypted device will notice is a different look to its log-in screen—it will not involve new usernames or passwords.

“It’s the data on the device that is valuable. The laptop itself is not as valuable and can be replaced,” Schmuhl said.

Anyone with questions about encryption can contact the Help Desk at (615) 898-5345 or help@mtsu.edu.

Grant winner will use it to teach how to design digital signs

Sheri Selph was on a trip last year when she discovered an idea for combining her love of graphic design with emerging technology for a new course at MTSU.

“Last year I did some traveling, and I started to notice how many touchscreens I was asked to interact with,” said Selph, assistant professor of Graphic Design in the Department of Art and Design. “I was just seeing them over and over.”

During the trip to Las Vegas, she used touch screens to check into her hotel, book restaurant reservations, and find directions on a local map.

“It seemed these types of screens were all over highly-trafficked public and private buildings. I started to realize how different the design of these screens were from the hand-held, personal devices we had typically been designing for in class,” Selph said. “I wanted to incorporate this type of design into our program, but unfortunately, I knew we’d have no way to test these designs or for the students to really appreciate their impact.”

The trend back toward “signs”—in this case interactive digital ones—seemed to go against the flow of recent years toward apps on hand-held devices. Interactive digital signs have an advantage over apps by being more reliable

See Selph on page 11
Online process for student evaluations of MTSU faculty being phased in

Student evaluations of MTSU faculty started moving from paper to online surveys this spring.

After a pilot program was completed last fall by several departments, the University gave the green light to phase in the program.

Most students began using online evaluations through Campus Lab at the end of the spring semester rather than the fill-in-the-bubbles paper form.

While the responses will be collected online, the results collected still will be processed using the current database created by ITD Systems Analyst 2 Curt Curry.

Curry has been handling the survey process for 20 years as of this spring.

In recent years he has sent out approximately 90,000 paper forms per semester to departments to be distributed to students. Then he received back approximately 60,000 completed forms to run through a scanning machine to pull the data.

Those numbers are due to a student often evaluating several professors. The flow of paper forms will be slowing down, but he doesn’t yet know by how much.

Curry said it often has taken 2 to 3 weeks for him and a student worker to simply prepare the completed forms to be run through the scanning machine—getting them all facing the same direction, smoothed out, and lined up perfectly.

It would take up to two hours just to scan a box of 5,000 paper survey results. Then the data processing begins.

Paper evaluations are done by students while they are in their classrooms, but the online evaluation link is sent out by email. That requires a good system of reminders for students to complete the form, he said.

“I had to create a program that actually takes this data and groups by questions and does averages,” Curry said. “The department chair can go in and make a list for everybody and it is broken down into seven categories. At a glance he can see his faculty and how they’re doing.”

That will not change under the new process—Curry will still take the results collected online and process them through that reporting format.

“I will get the data back, and instead of scanning, it I will make their data file they give me match what I have, to get it into my system,” Curry said. “So the reports will still be ours.”

ITD Systems Analyst 2 Yen Qualls worked on the programming for enrollment data to be fed to Campus Labs.

The new process will streamline gathering and publishing reports, said Barbara Draude, ITD assistant vice president, Academic and Instructional Technologies.

"Moving to an online methodology allows the process to take advantage of what the newest technologies can provide—the ability to complete the survey on mobile devices, the ease of completion for both on-ground and online students, accessibility for all students including those with disabilities," Draude said.

"That data can be gathered and analyzed much faster by eliminating the manual distribution, collection, and scanning that the old process required."
MTSU recently tested its emergency alert system with a message sent to the university's 25,000-plus registered users by email, text and automated phone calls.

No response or action was needed. But it served as a reminder to sign up for—or update your information in—MTSU's Critical Notification System.

It is designed to get the word out immediately regarding weather, public safety or other emergencies.

If your contact information has changed recently, update it at the Rave login site listed above to be sure you don't miss important messages.

All current MTSU students, faculty, and staff can update their Rave notification preferences by following the directions at www.getrave.com/login/mtsu.

Learn more at www.mtsu.edu/alert4u/.

When Neil Prater retired in April, everyone who knows him figured he would ride off into the "sunset" on one of his beloved motorcycles.

Prater retired April 30 after 10 years with ITD as an Oracle and SQL database administrator (DBA) and, yes, he rode off campus on his motorcycle.

Prater and his wife, Beverly, plan to spend a lot of time on the road in his retirement—literally in some ways.

Beverly has worked as a crossing guard for Murfreesboro schools for many years, and Prater said he plans to begin that work as well as a source of extra income. And they also are planning some motorcycle rides across the U.S. to visit family.

Prater, a native of Missouri, graduated from Southeast Missouri State with a degree in Computer Science and worked in various COBAL-related positions most of his career. He landed his first DBA job about 20 years ago, but his work at MTSU was his first on a college campus.

And it was a motorcycle ride that helped bring him to Murfreesboro nearly a decade ago.

"On one of our various motorcycle trips we took a trip to the Smokys from Missouri, where we lived at the time," he said. "When we were here on vacation we had said several times, 'You know this is an area where there are so many places to ride and so many things to see that it might be nice to live here!'"

"The surprising thing was when I got back home after my vacation, a large corporate entity in Chicago had bought my company. And at that point in time I began to put in applications for jobs in the state of Tennessee," he added.

Another thing co-workers knew about Prater was his love for two sports—St. Louis Cardinals baseball and University of Kentucky basketball. That combination came about because he was born in St. Louis and lived most his live in the Show Me State, but for a while lived in Kentucky as a child.

"Anybody who's lived there knows that St. Louis is probably the biggest baseball town in the world. I grew up loving the Cardinals, my dad loved the Cardinals, my grandfather loved the Cardinals," he said. "And I played nothing but baseball when I was younger."

And while his wife is from Lexington, Kentucky, he said he didn't know that until early on, and it proved a good opportunity to impress his future father-in-law.

"I actually graduated from high school in Glasgow, Kentucky," he said. "When I moved to Kentucky I was not a huge basketball fan, I was a baseball guy. . . I soon found out from my friends that the only thing they were interested in was Kentucky Wildcat basketball. And once you get tied in you're just part of it."

Later when he was taking Bev out on their first date in Cape Girardeau, Missouri, he mentioned to her father—a UK grad—that he was going to miss “the game.”

"He said, 'What game are you talking about?' And I said, 'Oh I don't miss the Wildcats!' He said, 'You're not going to dinner, sit down,'" he said. "And I sat down and watched the Kentucky basketball game with my future father-in-law."

He said Beverly later told him, "That kind of sold me on you."

His love of motorcycles began right out of high school when he worked as a service manager at a Kawasaki dealership. He took a break from motorcycle riding until about 2005 when the couple began riding together.

They plan a ride to Colorado later this summer and one to Maine next year.

See Prater on page 11
Creating a Document Accessibility Toolbar (DAT) for MS Word

Creation of “fully accessible” documents can be made much simpler with a free plug-in for Microsoft Word. The Document Accessibility Toolbar (DAT) is distributed by Vision Australia and can help you create accessible aspects of your Word documents.

Let’s look at the individual sections of the toolbar:

**Structure pane**

The Structure pane contains buttons that help you quickly mark structural elements of your documents. Doc title is the metadata title of your document. Title, Subtitle, and h1—h6 are all document styles that aid navigation with a screen reader.

Bullets, Numbering, and Nested list buttons all help users understand hierarchy within your lists, and the Breaks button will help you set page, column, and section breaks without having to press Enter repeatedly. Many line breaks can lead a screen reader user to believe there is nothing below the line breaks.

In adding structure, you are creating ways to help readers of all abilities move around the sections of your document.

**Images and Tables panes**

The Images and Tables panes include buttons that help you either insert a new picture and set the alternative text in the pop-up window that follows insertion or set the alt-text of an image that is already in your document.

The Tables pane is similar, where you’ll use the Insert table button to help you insert a table with accessible options already set up in the background, or you can use the Set type button for tables that already exist in your document.

**Navigation and References panes**

The Navigation pane includes Table of Contents and Table of Figures buttons that will help you add navigational structure to your pages and images.

The Link button will help you create descriptive links where you add a descriptive phrase that shows in the document, rather than the long, unhelpful website address. Header, Footer, and Page Numbering buttons will help you add even more navigational structure for all users.

**Note:** Screen reader users do not typically view the header or footer of documents. Be careful not to add any vital information to either.

The References pane includes buttons that will help you add common reference elements to your documents.

**Design pane**

The Design pane includes the Spacing button, which can help you add space before or after paragraphs without pressing the Enter key repeatedly.

Many line breaks can lead a screen reader user to believe there is nothing below the line breaks.

See DAT on page 6
DAT, continued from page 5

Alignment and Indentation buttons can help you position text without using the space bar exorbitantly. The same confusion as too many line breaks applies to too many spaces. They can hide important information from someone who cannot see the document. Font styling dropdowns help you to use appropriate styles for sections in your document, rather than using bold, italics, or underlines to denote sections.

Charts and Forms panes

The Charts pane includes buttons that will help you insert an informational chart in an accessible manner. I like to also include the data table that created the chart so that all users can view the numbers that created the visual.

The Forms pane includes buttons that will help you insert accessible form elements, such as text boxes, check boxes, and combo boxes. These will need some Help Text added by using the Properties button in the Forms pane on each form element.

Inspect pane

The Inspect pane includes buttons that will help you check the accessibility of the elements and sections of your Word document. You can also save the document as HTML with the <s> button or copy the HTML with the <c> button.

This can give you code that you can then put into a webpage, because HTML is considered one of the most accessible mediums, due to its availability on almost any Internet-connected device.

Lastly, the WORDS screen reader button can give you a simulated experience of reading the document with screen reading software to find if all of your document elements are navigable to people that use screen reading software.

For more information on how many of these document elements work, refer to the FITC Word Accessibility webpage and click “Full list of Accessibility Issues and Fixes.”

Contact me at ext. 8445 or William.Burgess@mtsu.edu.

Instructional design team at work

Scott Haupt has been journeying through the cosmos, and Jan Pontia has been working on Interpersonal Communication skills in recent months.

It’s all part of the new ITD Instructional Support Team’s work in piloting a new approach to course design. With faculty from Organizational Communication and Physics/Astronomy serving as subject matter experts and providing raw course materials, the goal is to complete these two courses by this summer.

“Moving away from PDFs and Word documents, it’s going to be more interactive for the students,” said Haupt, ITD instructional design specialist. “It’s going to have an open educational resource textbook as opposed to the traditional textbook. We actually embed videos in the course, so it’s going to keep the students hopefully more engaged.”

Pontia, instructional technology specialist, has been working with faculty to develop the Interpersonal Communication online course, while Kourtney Smith, ITD learning multimedia developer, is creating video segments of lectures.

Bill Burgess, Instructional Accessibility Specialist, is confirming course accessibility. Plans are in place to add two courses to the pilot to be delivered in Fall 2018.

In an instructional design team:

- The faculty member(s) serves as subject matter expert, establishing learning outcomes and providing content leadership
- The instructional designer/technologist(s) serves as the pedagogy expert determining appropriate teaching and technology methodologies to use.
- The learning multimedia developer creates graphic, video, and other course elements to enhance the course materials
- The accessibility specialist provides quality checking to assure that the course meets high, rigorous standards and will be accessible to all our students.
- The educational assessment expert(s) provides direction on assessing the outcomes of the project.

The instructional support team plans to offer this service to more course developers later this year.

For more information, please contact Barbara Draude at 615-904-8383.
Fernandes joins ITD's Team UC to focus on Skype For Business

Silvia Fernandes joined ITD in January as systems administrator, unified communications.

Born in Portugal, Fernandes grew up in New Jersey and earned a degree in Telecommunications Management from DeVry University.

"My entire 22-year career has been in telecom/unified communications," Fernandes said. "I have previously worked for Dialogic and Intel and most recently Princeton University in different telecom and unified communications roles,"

At MTSU, she works with all aspects of "Team UC," with primary responsibility in Skype for Business.

"I will be focusing on user outreach, training, and future enhancements," she said.

Away from work she enjoys walking/hiking and photography—especially of the ocean—live music, and "finding cool places to eat (breakfast for dinner is a fave)."

Fernandes likes exploring flea markets, going antiquing and taking road trips to "anything touristy or scenic."

"The sillier and more historic the better," she said. "I also have a deep affinity for Wonder Woman."

"I'm excited about becoming part of the MTSU community and discovering all that Tennessee has to offer."

Skype Spotlight

Learn the ABC's of A/V conferencing through hands-on training

Audio and Video Conferencing is easy at MTSU with Skype for Business.

Integration with Microsoft Outlook allows you to virtually meet with MTSU colleagues and any external users, including those with consumer Skype accounts.

Schedule meeting—Outlook/OWA adds your conferencing information (personal conference link and call in number) into the body of the meeting invite automatically.

- In Outlook calendar, select New Skype Meeting or within an Outlook meeting click Skype Meeting.
- In OWA calendar, create new meeting and click on Online Meeting to populate the body of the invite.
- Complete the rest of the meeting invite with subject, times, etc.

Join meeting—Double-click the meeting from your Outlook/OWA calendar, then click "Join Skype Meeting."

All external users will be able to the same. If they have S4B, it will automatically open the client. If they do not have the client, they will be able to join as a guest with the S4B Web App plug-in or call into the audio portion of the conference.

Enhance meeting—Add video and share content using embedded controls in the S4B client.

For more information, visit mtsu.edu/itdtele/skype/.

If you or your department would like hands-on training or have questions, email uc.training@mtsu.edu.

Wilcoxon is new systems admin II

Scott Wilcox started with ITD as a systems administrator II in February.

Wilcox earned an Associate’s degree in computer networking and bachelor’s degree in Information System Security from ITT Technical Institute.

Prior to that, he worked in several lead technician and systems administrator positions in the Las Vegas area, and was network engineer for a managed service provider in California.

“I was basically a traveling network engineer and was responsible for many companies’ workstations and servers,” he said of that role.

At ITD, Wilcox has been tasked with upgrading the Solarwinds alerting system, becoming backup and soon primary to Nutanix Clusters, the Licensing Server and a backup on our on premise Exchange Servers.

He and his wife, Liz, have been married 11 years, and have a son, Rylen, who recently turned 2.

Wilcox has enjoyed playing Frisbee golf and volleyball, and while living in Las Vegas began following the Golden Knights hockey team, which made the Stanley Cup finals in its first year ever.

“I just started watching hockey this year being from Vegas, and the new team there caught my interest," he said.
Growing up at summer camp sparked his tech career

ITD Systems Administrator 2 Brad Meyer grew up at summer camp.

Not in the sense of regularly spending time there, but literally living at Horton Haven Christian Camp in Chapel Hill, Tennessee, where his mom worked in the kitchen and his dad was the head maintenance man.

And while a lot of time was spent in outdoor activities, games, and Bible study, it also was where he first developed an interest in computers.

“I tinkered with computers growing up. When my parents’ computer broke I would figure out how to fix it,” Meyer said. When speakers came from seminaries, including from Emmaus Bible College, he enjoyed their multimedia presentations, and would often follow a computer technician around to watch him work.

That experience led Meyer to Emmaus in Dubuque, Iowa, to earn a Bachelor of Science degree in Computer Information Systems. He worked in the computer repair shop there.

“I landed a job as a Help Desk technician at Loras College in Dubuque, the same town I went to college in,” Meyer said. “Two years later I got promoted to a network administrator.”

Three years later, he and his family moved to Tennessee and he got a job as the IT Director at TechnologyAdvice in Brentwood, then 10 months later in May 2015 he started work at MTSU as a Systems Administrator I.

“I wear many hats as do most systems administrators, but my primary responsibility is being in charge of virtualization, server virtualization and Citrix XenApp/XenDesktop,” Meyer said.

In that role he is primarily in charge of the infrastructure that most of the servers run on at MTSU. Citrix allows students and faculty to access a variety of desktop configurations with apps to meet their academic needs.

“I also am the one who makes student and faculty software available in our Citrix environment, which you may know as apps.mtsu.edu (or the new cam.mtsu.edu).

ITD Systems Administrator 2 Brad Meyer is responsible for MTSU’s Citrix virtualized desktop environment.

“This environment also allows many of the applications to be accessed off campus so students don’t have to necessarily be physically in a computer lab to do their work,” he said. "It’s my goal to have as many applications as possible in the Citrix environment to make student learning more convenient.”

He and his wife, Aimee, have three children: Owen (6), Charlotte (5), and Flynn, (2).

“I love soccer and enjoy playing it, though I haven’t been able to do that in a while. I’m a fairly big gamer and really enjoy PC gaming and board games,” Meyer said. “If I really had to describe what I enjoy, I’d have to say whatever my friends are doing. Whether that’s playing sports, board games, camping, watching movies, etc. . . . I greatly love being with other people.”

Digital signs can come in a variety of forms. In this example, multi-sized displays were grouped to create a design element.

The Jones College of Business was looking for a way to convert a donor recognition area that housed plaques recognizing supporters into a digital statement that also told of awards, recognitions, and events.

The result: interactive and non-interactive displays that provide a way to explore the overall college story.
Multi-Factor Authentication adds new layer of security

ITD has begun implementing Multi-Factor Authentication services to protect MTSU accounts.

This will be similar to services offered by Apple, Google, Microsoft, Amazon, Facebook, Twitter, credit card companies, and universities such as Harvard, Yale, Princeton, Stanford, Northwestern, Notre Dame, the University of Alabama, Ohio State University, and the University of Michigan.

Specifically, this means MTSU systems using single sign-on (SSO) services will require a second factor of authentication in addition to a password.

So if hackers compromise your password, they would still need a second factor, like your phone, to complete an authentication request. MTSU systems requiring students to enter the MT Mail credentials or employees to enter their Pipeline/FSA user name @mtsu.edu use SSO services.

With more MTSU services available on the internet, it has never been more important to protect your MTSU account from unauthorized access.

Phishing attacks, malware, and social engineering constantly target the University population with the intent of stealing users’ credentials to gain unauthorized access to MTSU systems.

While users should always create strong passwords to protect against unauthorized access, passwords alone are simply no longer a sufficient means of authentication as these attacks continue to become more sophisticated.

MTSU’s Information Technology Division is making Microsoft Azure multi-factor authentication available to all users as an opt-in service. Users can visit the following MTSU website to opt in to the service and enroll their accounts.

Students should log in with their MT Mail user name and password (e.g., xyz2a@mtmail.mtsu.edu). Employees should log in with their MTSU Pipeline/FSA user name @mtsu.edu (e.g., jdoe@mtsu.edu).

Prior to opting in, we encourage you to read our FAQ site and enrollment instructions, which are available at the following links. If you have any questions, please contact the ITD Help Desk at 615-898-5345 or help@mtsu.edu.

Multi-Factor Authentication FAQ website mtsu.edu/security/mfa-faq.php
Multi-Factor Authentication instructions mtsu.edu/security/mfa-instructions.php
Multi-Factor Authentication opt-in website https://webservices.mtsu.edu/EnableMFA

IT Tips & Tricks
There’s reason for pesky alerts

You may have noticed lately while trying to access various websites that you get an error message such as the one shown at right.

This error message has to do with the security of the websites you are trying to access. There is a big push right now on the internet to improve security and this happens to be one of those ways.

In this example, Google is using their Chrome internet browser to bring to your attention that the security certificate the website uses has expired.

To continue onto the website you will need to click on “Advance” and then on “Proceed to (whatever the website is called)” in order for Chrome—or whatever internet browser you are using—to actually load the website for you.

The error message is just not specific to Google Chrome—it can happen with other internet browsers such as Microsoft’s Internet Explorer and Mozilla’s Firefox.

Also, it is important to stress that this error message can happen on computers (Windows or Macs) as well as on personal devices such as cellphone or tablets.
Virtual Reality, continued from page 1

To that end the team has received donated equipment and grants, including a Faculty Instructional Technology Innovation grant awarded again this year after a five-year break. ITD reallocated funding to bring back this grant program for support of innovative teaching environments.

A group that also included Professors Marie Elliot and Alison Sultan were awarded the grant for the “Immersive Storytelling Techniques and Technologies” project—a collaborative effort between the Media Arts, Recording Industry, and Animation programs.

The project is starting to take shape in a Bragg Building lab with computers, a headset and handheld controllers, and an octagonal treadmill that will eventually be used by people moving around inside VR programs. On a recent morning, some visitors were experiencing Virtual Reality and sharing ideas for how to use it.

“Right now we’re watching someone in an experience. Her whole field of vision is replaced. The reason it’s truly compelling is that everywhere she looks, that is where the image is,” said Merchant, as a visitor tried out the VR headset.

“If you’re watching a movie or TV show on a screen, when you turn your head the image goes away. Although that seems quite simple, it immediately takes you out of the experience. Even in a movie theater with great surround sound, you’re not in the experience, you’re at the experience,” Merchant said.

Bringing the idea to reality required “the right tools, and the tools are pretty expensive.

“That is why we were so blessed to get this grant from ITD that can help support this,” Merchant said.

Merchant and Dean said they can hardly keep up with all the fantastic ideas for using the technology that they are getting from students, faculty, and the community.

“We don’t want this to be a little hidden room that no one uses and say ‘It’s cool, we’ve got our own little toys.’ No, we want people back here making stuff.”

Stephanie Dean, Media Arts assistant professor

One VR program being viewed by recent visitors to the lab uses actual 911 calls, a recreation of a real neighborhood and real people involved in a domestic violence case. Several family members try to calm down a man who is holding a gun, while they wait for police.

The VR viewer is standing in the middle of the confrontation. Then the scene shifts to outside and when police arrive and begin to enter the house, a gunshot is heard from inside.

“You’re there, you’re next to the man who murdered her,” Dean said.

Even though it was not created here, it is an example of the type of collaborative effort they envision—with research and documentation by Journalism students, scene and character creation by Animation students, and use of real audio by Recording Industry students.

Some visitors from the Amazon region of Brazil tried out VR for the first time during a recent visit to MTSU. Guests of Sociology and Anthropology Professor Richard Pace, Bepunu and Pat-i Kayapo are indigenous filmmakers who are interested in incorporating VR into their work.

A group of MTSU students will work with the tribe this summer—including several filmmaking students.

Classes are being created to support the VR project. Dean has been teaching 360 Storytelling and Producing, an intro to making VR films. Merchant will teach one on Audio for Immersive Technology this summer.

“We’re quickly learning that the sound component is crucial to immersion, a sense of presence, that suspension of disbelief,” Merchant said. “It’s amazing to figure out what it’s capable of doing, and then the next step of it is, ‘How do I make that experience for others?’”

“If I move around in front of you, if you close your eyes, you would still be able to track my voice,” Merchant said. “For the visuals to be believable, the sound field has to be believable as well. And so we’re going to be talking about theories and concepts about audio over headphones.”

Part of the grant will be for a sound cage—a 24-speaker array that you can step inside of—to recreate this kind of moveable sound field without headphones.

“About half of what we know from before—from filmmaking, and radio and audio, those things still apply. But about half of it is all new. So figuring out this new half is what this lab is all about,” Merchant said. “In VR, the viewer has the power to look where they want. So in a way they are kind of directing. They are choosing where to put the camera, which is their field of vision.”
A longtime athlete—he played baseball at different levels until he was 30—Prater said he was an avid runner in his younger days and could often be seen on long lunchtime walks around the University campus.

Prater said he’s enjoyed work at MTSU because of the opportunities to collaborate with a smaller IT team on problem-solving.

“We had a very small staff so I had a lot of leeway in making changes and trying to improve things,” he said.

“I’ve made some great friends while I’ve been here. You really get to know them well . . . I’ve had a chance to work with so many people and see so much talent come in while

because they don’t rely on wi-fi, and they are more accessible for groups of people, or visually impaired users.

“It was tough to decide—do we need something big? Is that the way the world is going to go? But the more research I did about it—you can’t always rely on your phone. At least you know the information coming through the hardwire from the server is going to be good information. I think that’s one reason why they are becoming popular,” she said. “There are definitely some plusses to having a big screen.”

Another thing that influenced her was a recent visit to a museum, where she saw an educational kiosk surrounded by students.

“Kids think all screens are touch screens,” she said.

What she needed was funding to teach how to create touch-screen digital signage as part of her Graphic Design curriculum. Enter the Faculty Instructional Technology Innovation grants, which were available again this academic year after a five-year break.

Selph had one of three selected proposals—adding UI/UX Large-Format Design to the Graphic Design curriculum.

The grant proposal is to expand an existing Interface Design course by adding a large-scale touchscreen monitor. The grant will be used primarily for new equipment.

She said the goal for ART 3400 Interface Design and ART 4440 Interactive III in 2018 is to be able to broaden the students’ classroom experiences by having them learn how to design and test on larger interactive screens using UI/UX (aka User Interface and User Experience) methodologies.

“Having a large, interactive screen in Todd Hall would allow students to mimic the commercial environment of designing for informational kiosks and the various applications of digital advertising,” Selph said.

“Specifically, the students taking Interactive Design III and Interface Design could be taught UI (designing for the screen). But through new learning objectives for the course, they could participate in UX testing scenarios as well.”

An additional enrichment plan Interactive III involves a collaboration with another academic area at MTSU to create digital-learning tools for educational topics outside of Art and Design. Art and Design students would create digital, learning “exhibits” with content support from another department.

These digital exhibits could be displayed in other areas of the campus, city public buildings, libraries, and local museums, Selph said.

The last of her enrichment objectives is to have students explore interactivity in the Studio Arts disciplines.

“Currently within the Department of Art and Design, we are looking to add more 4D art learning pathways. 4D art is the practice of using different technical approaches within a single piece or show that often includes time-based or interactive media,” she said.

“With a large-scale interactive screen, the artist can provide a new kind of experience for the user.”

The department’s accreditation agency, the National Association of Schools of Art and Design (NASAD), recognizes 4D as a valuable addition to college art programs.

“I am particularly interested in having Studio And Graphic Design students create digital works of art that could be experienced in a responsive nature in our university’s Todd Art Gallery by the local community,” Selph said.

She told the selection committee that her “expected results are that the students will learn competencies in

Prater, continued from Page 2

A longtime athlete—he played baseball at different levels until he was 30—Prater said he was an avid runner in his younger days and could often be seen on long lunchtime walks around the University campus.

Prater said he’s enjoyed work at MTSU because of the opportunities to collaborate with a smaller IT team on problem-solving.

“We had a very small staff so I had a lot of leeway in making changes and trying to improve things,” he said.

“I’ve made some great friends while I’ve been here. You really get to know them well . . . I’ve had a chance to work with so many people and see so much talent come in while

I’ve been here.”

He’s been part of several large campus-wide technology initiatives over the past decade with ITD.

“If you’re a tech person, that’s what you like—you want that,” Prater said.

“I think the biggest accomplishment is that we brought in all our SQL server databases that were scattered all over campus that were not maintained, that were on people’s personal desktops, and we brought them all into the data center and made them able to be monitored and created processes to automatically back them up,” Prater said.

“And we made them much more secure.”
“When I get it fixed it makes me feel good.”

Ratliff earned a Computer Information Services degree and Masters in IT Security Assurance. He started on the Help Desk in 2003 while an undergraduate student then in 2005 began working there full time. He said his favorite thing is to take on the most vexing tech challenge that comes in.

“I like to try to figure a problem out,” he said. “I think when I was 8 years old I tore apart my toaster and my mom was wondering what I was doing. I just told her I wanted to take it apart and put it back together.”

He received the honor in April in a surprise orchestrated by Alan Franklin, ITD director of Client Services, who “took advantage of my helping nature,” Ratliff joked. Franklin told him he had to go help set up for the awards ceremony because no one else was available.

“He knew I would volunteer,” Ratliff said with a laugh. “So as soon as he said that I said ‘I can help you with technical support, whatever I need to do’ . . . He said, ‘oh by the way it is a formal event so dress up a little bit’ I didn’t get suspicious at all.”

Until he showed up in the Tennessee Room of the JUB and saw nothing but a sound system and asked: “where is all the technology?”

“They got me,” he said.

Soon after he was presented the award. Ratliff said it wasn’t for any one particular project, although he is very proud of the work he did setting up Closed Captioning technology on campus. The University was required to get CC capable for live-streaming on campus by 2021, and he helped get it up and running last fall.

“They came to me and asked me, ‘hey the University doesn’t have Closed Captioning, is there any way we can do this?’” he said.

Ratliff was quick to thank a number of others for helping get CC ready for graduation ceremonies this year.

Ratliff lives in Dismal, Tennessee, but said his life has been anything but that lately although he has had some dark periods.

He has had to overcome two major medical problems. He broke his back working in the private sector before coming to MTSU—then re-injured it later. It was while going through rehabilitation that he learned of financial aid for going back to school and took advantage of it at MTSU.

Then about four years ago had a heart attack at home and had to drive himself to the hospital. After going through that, he said “Every day is a blessing, nothing gets me down.”

Raised in Hendersonville, Ratliff joined the Navy at age 17 before even graduating from high school and served on the aircraft carrier USS Midway.

“I was a flight deck director, so I directed $50 million aircraft and I had to park them within a half inch of each other,” he said. “It was a very high-stress job. In fact it was the most dangerous job in the world in 1987, when I was in it. It was an adrenaline rush and I loved the excitement.”

More recently another deck has been a big part of his life—he built a 1,400-square-foot wooden deck attached to his home and “man cave.”

“You can see it on Google Earth,” he said.

While the Help Desk isn’t quite as high stakes as landing Navy jets as a teenager, he said that background allowed him to direct traffic to set priorities for tech assistance.

“I believe that really helped me to do damage control here. I believe that really helped me to use my ability in emergency situations,” he said.

"Every call is an 'emergency', so I have to determine what really is an emergency and how I can go about fixing this?"

Recent Argos upgrades bringing improvements in design and function

Argos was recently upgraded in design and function.

The user interface is more modern-looking and easier to navigate with better scaling on different screen sizes.

You no longer have to select which Argos version to use when you log in to the Argos Client Application.

The search feature in the Argos client was moved from the Search tab into a search bar at the top of the screen.

The Argos logo was updated to the new red Argos leaf throughout the product.

When running a dashboard in the Argos client, the keyboard focus now automatically goes to the first form object on the dashboard so you can start entering parameters without needing to click them first.

A new charting type was added that has a more modern look and feel and provides better consistency between charts in the Argos client and the Argos Web Viewer.

Also added was the ability to pin a default saved OLAP setting to load automatically when running the dashboard.

Reports saved in the Web Viewer now include the report name, date, and time in the default filename.

Other improvements have been made for Report Writers and DataBlock Designers to use in development. Learn more at an Argos workshop.

To register visit mtsu.edu/itd/workshops/calendar.