



Information Technology Services

2015 ANNUAL REPORT



Contents

- 3 Letter from CIO
- 4 About ITS
- 6 Education
- 8 Research
- 9 Infrastructure
- 10 Security and Privacy
- 11 Services
- 12 Collaboration
- 13 Financials
- 14 The Year Ahead

Our Mission

The mission of Florida State University Information Technology Services (ITS) is to provide an effective, comprehensive and secure technology infrastructure to deliver the highest quality and sustainable information and technology services. ITS strives to engage the university community in support of the university's mission of teaching, research, creative endeavors and service.

Our Vision

Information Technology Services will be a prominent strategic partner in achieving Florida State University's vision by providing premier information and technology services and direction for the university.



Letter from CIO Michael Barrett

The new year is always a good time to reflect on the past and plan ahead for the future. With that in mind, I am pleased to provide you with our Annual Report for 2015.

During the past year, Information Technology Services (ITS) provided support for mission-critical work across the university. From student success to STEM research, we provided the infrastructure and support for university initiatives that were essential to advancing Florida State University towards our goal to become one of the top 25 public universities in the nation.

To help achieve this goal, we made significant progress on increasing access to technology resources across the Florida State University campuses. We launched the Nolenet Express-lane, a dedicated, high performance research network; coordinated funding for a record number of instructional technology projects through the Student Technology Fee; and expanded university wireless coverage as part of the digital campus initiative. With these accomplishments, and a multitude of others, ITS is in a better position than ever to help advance university research, teaching and collaboration.

In the year ahead, we will build on these accomplishments as we continue to serve the mission of the university. Expect to see more technology that supports innovative teaching and learning environments, strategies that expand the university's research computing resources, processes that reduce enterprise risk and applications that deliver more and more personalized content to the university community. Internally, we are advancing the organization with the ongoing adoption of new IT service management processes and the pursuit of more sustainable funding models.

Through it all, our dedicated staff, along with university partners, work tirelessly to advance the university's technology through the projects highlighted in this report and hundreds of other activities that support mission-critical work at Florida State University.

Thank you for taking time to read about several of our recent successes and forthcoming endeavors. I look forward to working with you in the year to come.

Michael Barrett
*Associate Vice President and Chief Information Officer
Information Technology Services*



Find out more about ITS
and its many services by visiting

its.fsu.edu

About ITS

If you've ever scratched your head trying to make sense of "ITS" at Florida State University, you're not alone. Information Technology Services is a huge organization (350 strong), and we like to speak in acronyms (sorry, it's our techy side shining through). Who wouldn't be a little confused? So let's shed some light on the question, "What is ITS?"

Information Technology Services (ITS) is the central IT organization for Florida State University. We provide vital technology support and equip students, faculty and staff with the technology devices and services required to complete mission-critical work.

ITS consists of nine units responsible for the strategic planning, oversight and security of FSU's IT infrastructure, enterprise systems and data. Most ITS units operate behind-the-scenes to keep things running around the clock at Florida State, overseeing services such as wired and wireless Internet connections; telephone and voicemail; enterprise systems such as OMNI, Student Central and myFSU Portal; and data centers that store and process the massive amounts of digital data being created and exchanged every second. We also provide a wide range of more visible services to the FSU community, including email, classroom technology, website development, online training, computer labs, mobile apps and software. And it doesn't end there. Delivering all of these services is a complex job that requires a complex infrastructure. Day-to-day, ITS maintains 575 servers, 8,400 computers, 9,700 phone lines and more than 20,000 network connections to support the university's operations.

Through these units and services, ITS provisions the tools to enable excellence in education, advances in research and continuous improvements throughout the university.



117

ITS services available
to Florida State



\$1,112

IT spending per student

Information Technology Services

Reports to the Provost and Executive Vice President for Academic Affairs
and indirectly to the Vice President of Finance & Administration





Student Technology Fee funds brought several of **Bill Nye the Science Guy's** recommendations for the GEOSET Studios to life.

Education

Student Tech Fee helps improve student learning

Green screens, LED lighting, newsroom set... Welcome to FSU's GEOSET Studios—a free, CNN-broadcast-worthy recording facility and immersive learning environment maintained by the department of Chemistry. After the GEOSET Studios were officially launched by television science star Bill Nye, Student Technology Fee funds awarded in 2015 were used to fund high-end camcorders and recording equipment to fulfill several of The Science Guy's recommendations for improving video, audio and lighting quality. Each year, the Student Technology Fee helps fund millions of dollars' worth of instructional technology at Florida State University. ITS plays a critical role in managing the Tech Fee and coordinating the distribution of these essential funds. In 2015, 46 proposals were awarded Tech Fee funding, totaling \$1.45 million, representing about one third of the total funds. An additional \$3 million was distributed to the colleges and central IT organizations to fund improvements in instructional technology. A full list of funding awards can be found on the ITS website.

its.fsu.edu/Student-Technology-Fee/Allocation-and-Award-Details

Technology Enhanced Classrooms promise speedy support

Wouldn't it be nice if life came with an "Easy" button? If you are teaching a class in one of FSU's 250+ Technology Enhanced Classrooms (TEC), it does. Instructional staff in need of immediate classroom assistance simply have to click the "Problem Report" link on the classroom computer and an ITS staff member is on the scene within five minutes to troubleshoot the problem.

"We support everything from computers and projectors to whiteboards and student seating," Jay Willoughby, Assistant Director of Instructional Technology, modestly explains.

In 2015, ITS Classroom Support responded to more than 1,300 help requests and supported the technology for more than 225,000 class sessions (pictured right).

Tegrity Lecture Capture Software



3,699
lectures
recorded



174,936
lectures
viewed



\$1,229,431
spent on TEC
classrooms



87%
general purpose
classrooms
supported by ITS

The Freedom of Information Act - Summary

- ▶ Title 5 of the United States Code, section 552, was signed into law in 1966
- ▶ any person has the right of access to federal agency records or information
- ▶ agencies of the United States government are required to disclose those records
 - ▶ presumption of disclosure; the burden is on the government
 - ▶ nine specific exemptions in the FOIA
- ▶ Administered by the U.S. Department of Justice
- ▶ Covers records held by Executive Branch agencies "ONLY"



RCC Researcher in Action Scott Stagg

Dr. Scott Stagg, associate professor of chemistry and biochemistry at the FSU Institute of Molecular Biophysics, relies on the RCC to transmit 3D images of frozen biological molecules around the clock from the 1.7-ton FEI Titan Krios microscope.

Research

NoleNet Express-lane speeds up university research

Florida State University can put the pedal to the metal on its research efforts thanks to the NoleNet Express-lane, a high-speed network dedicated to transmitting large amounts of research data. The research-exclusive network, made possible by a \$230K National Science Foundation Grant, was completed in 2015. The NoleNet Express-lane enables researchers at FSU to quickly run data-intensive applications or transmit large data files with colleagues worldwide—at 10 gigabits per second, to be exact. While the NoleNet Express-lane will likely have the biggest impact on Florida State University's Science, Technology, Engineering and Mathematics (STEM) programs due to the large volumes of data involved in these fields of research, overall improvements will be realized at local and national levels. "The Express-lane opens the door for a host of new research opportunities," says Paul Van Der Mark, Interim Director of Florida State's Research Computing Center. "The network is helping us attract world-class faculty and provide current faculty and students the resources they need for groundbreaking research."

HPC scheduling system saves university \$100K

Each day, the High Performance Computing (HPC) cluster at the Research Computing Center processes more than 11,000 jobs. With such a high demand, researchers must schedule data analyses to run at specific times. Slurm, a new workload manager launched in June 2015, makes it easier for researchers to schedule these jobs. The open-source software also delivers an entire ecosystem of new tools and software packages to support FSU's research community and saves the university thousands of dollars annually.



1 Petabyte
research computing
storage capacity
(that's 1,000,000 gigabytes!)



\$6,943,422
RCC research
grants supported



28%
increase in
supercomputing
usage hours

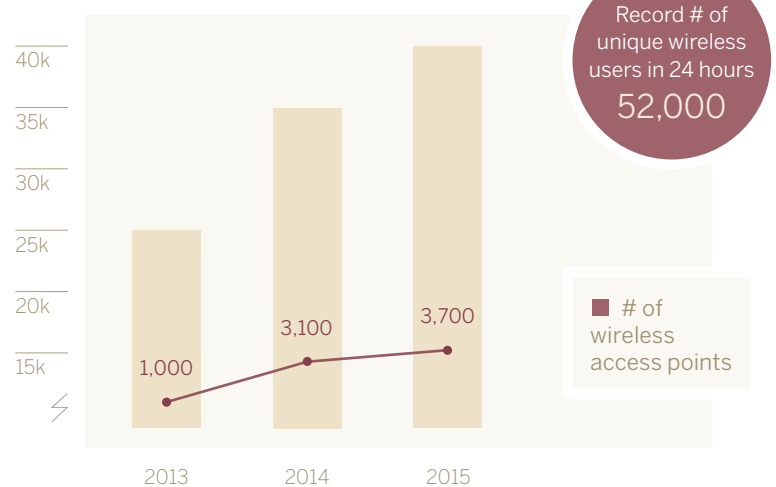
Infrastructure

Academic Wireless Project boosts campus Wi-Fi

A large-scale upgrade to Florida State University's wireless network bolstered campus Wi-Fi at more than 50 academic areas around campus, creating noticeable improvements to wireless coverage and connection speeds. In 2015, 500 wireless access points were added to the top areas identified by students, including Oglesby Union, HCB, Shores, Strozier Library and Landis Green (pictured). The academic wireless project—led by ITS—seeks to keep up with the surge of wireless usage on campus. “It’s not just the number of users that has increased; we’re seeing more and more people connecting to the wireless network with multiple devices,” explains FSU Chief Information Officer Michael Barrett.

Daily usage of Florida State’s wireless network has increased 60% over the past three years, with an average of 40,000 unique users accessing the network each day. The two-year project was a Student Technology Fee initiative, subsidized in part by the student-supported fund.

Average # Unique Wi-Fi Users by Year



Guest Wi-Fi network launches for campus visitors

Visiting researchers, media, family and other guests to Florida State University’s main campus can access free, public Wi-Fi using the FSUGuest network. The network was launched by ITS in August 2015 and averages 200 guest visitors per day. FSUGuest replaced the longstanding FSUWIN network and elicited improved network security by transitioning FSU students, faculty and staff to use campus’s secure Wi-Fi network, FSUSecure.



Security and Privacy

24/7 monitoring of the FSU network improves cybersecurity posture

FSU partnered with the Multi-State Information Sharing and Analysis Center (MS-ISAC) to implement 24/7/365 monitoring of the FSU network. Funded by the Department of Homeland Security, the MS-ISAC offers monitoring services and cyber threat prevention, protection, response and recovery assistance at a significant savings to the university. Through this partnership, the university not only gains 24-hour-a-day expert analysis of the FSU network, but also receives timely cybersecurity advisories and regular guidance on current security topics and best practices.

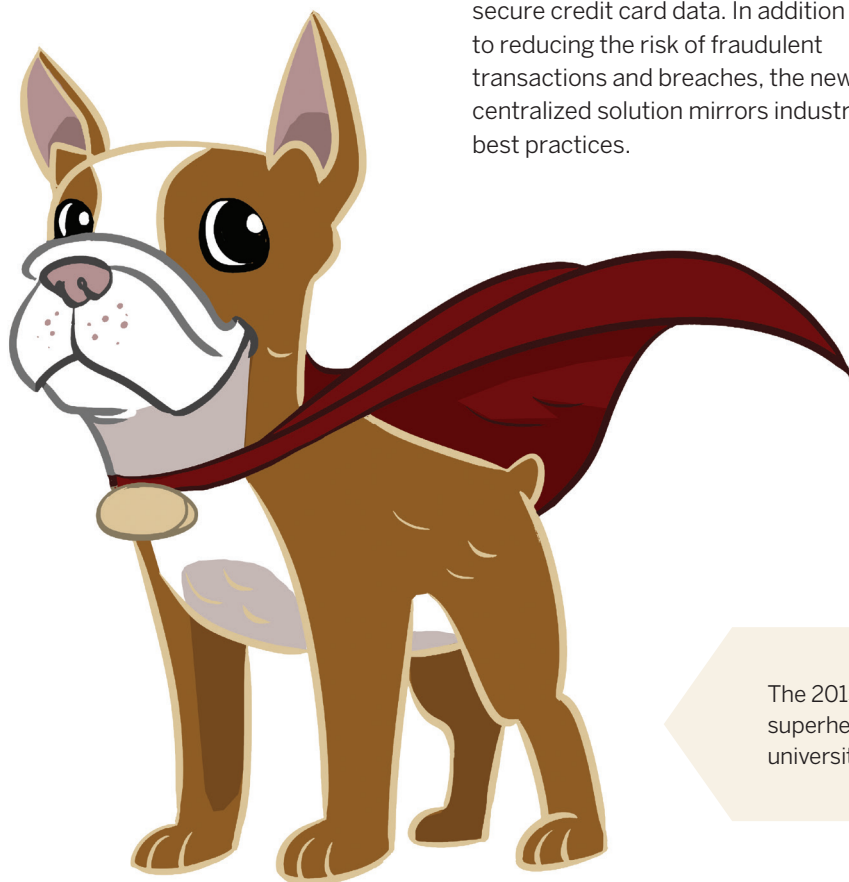
Centralized payment infrastructure and processes reduce risk of credit card fraud

Tuition, parking permits, athletic tickets, meal plans, clinic care... the list goes on and on. More than 45 departments at FSU accept credit/debit cards to conduct university business. Starting in 2015, ITS, in partnership with the university Controller's Office, undertook a critical, university-wide project to consolidate, centralize and secure credit card processes. The project established requirements and built the technology infrastructure to ensure all FSU departments accepting credit cards comply with Payment Card Industry Data Security Standards (PCI DSS), which outline how to handle, store and secure credit card data. In addition to reducing the risk of fraudulent transactions and breaches, the new, centralized solution mirrors industry best practices.

FSU ITS coordinates the Security Officers' Committee, which meets monthly to review current cyberissues, threats and experiences across Florida's twelve state universities.

Cybersecurity campaign receives campus and national acclaim

October's 'Be a Cyberhero' Cybersecurity Awareness Month campaign challenged students, faculty and staff to don superhero capes and make it their mission to stay safe online. The ITS campaign used a vintage comic book theme to encourage the FSU community to follow basic cybersecurity tips. As part of the campaign, 3,300 individuals signed the Cyber Pledge, and three lucky winners were awarded HP EliteBook tablets, donated by Hewlett Packard. The award-winning campaign received national acclaim from leading IT organizations, such as EDUCAUSE and the Higher Education Information Security Council.



1,412
security alerts
sent to university
business units

The 2015 **Be a Cyberhero** campaign introduced a new superhero—Rascal the Boston Terrier—to encourage the university community to stay safe online.

Services

Cellular Allowance Program saves university \$100K annually

Eligible university employees get a monthly allowance (no dishes, laundry or chores required) with Florida State University's new cellular allowance policy. Rather than receiving a university-issued cellphone, employees obtain cellular service through a personal account and receive a monthly allowance. ITS led the initiative and converted 579 phone lines to the new model, saving the university approximately \$100K in annual expenses. In addition to establishing a more cost-effective service model, the policy follows the BYOD (Bring Your Own Device) trend and gives employees the option to choose their cellular carrier, which was met with accord across the university. "Moving to the new cellular allowance program was a very smooth transition for us," recalls College of Medicine budget analyst Jacob Echols.

Responsive Web templates revamp university websites

ITS released three, brand-compliant, mobile-friendly templates for eZ Publish websites (pictured). The new templates—designed in partnership with University Communications—give university websites a polished, unified look in line with Florida State University's brand standards. The new templates are also responsive, which means they are easy to read and navigate across a wide range of devices—from desktops to mobile phones—without excessive scrolling or resizing.



5,417

IT service orders and repairs processed



Software savings across university

\$7.28M

by departments

\$835K

by students

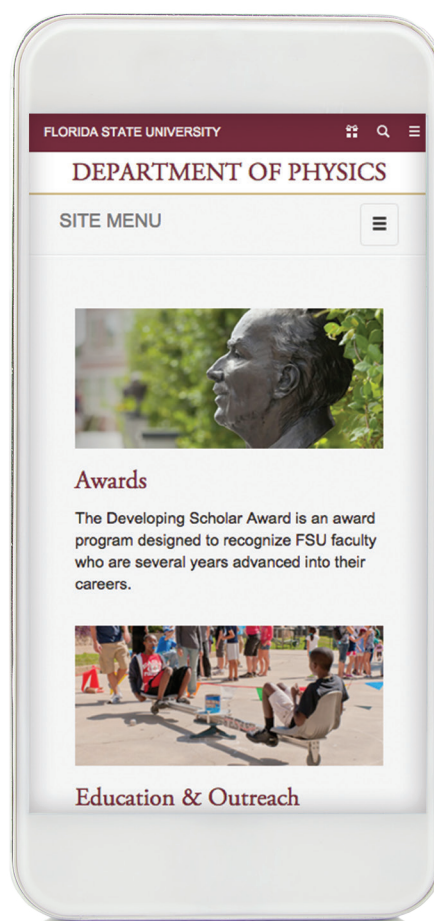


20,457

new downloads of myFSU mobile app

Employee email upgrades to Office 365

Cloudy never looked so good. Starting in 2015, ITS migrated all employee email accounts from Exchange, Florida State University's on-site email system, to Office 365, Microsoft's cloud-based email, calendar and collaboration suite. The massive upgrade moved 20,000 active email accounts within four months. Office 365 also gave employees access to one terabyte of cloud storage with OneDrive for Business; online versions of Word, Excel, PowerPoint and OneNote with Office Online; and free downloads of Office 365 ProPlus.



ITS offers 30 unique software products to the university at deep discounts through the ITS Software Store, saving the university **\$10,468,000** in 2015.



ITS worked with Student Business Services to implement early disbursement of financial aid, allowing students to receive the money earlier and be better prepared at the start of the term.

Collaboration

Service Desk responds to over 77,000 support requests

The ITS Service Desk is FSU's first point of contact for assistance with campus technology questions. In 2015, the Service Desk responded to 77,091 support requests. Throughout the year, the ITS Service Desk provided valuable support for departments and initiatives all over campus, including fielding calls about Admissions applications, assisting with online transcript requests and decommissioning the OMNI portal. In addition to helping the FSU community solve all its technology woes, the ITS Service Desk also fields calls for general university inquiries and in 2015 answered everything from "What are the FSU colors?" to "How do I report a shooting star to the astronomy department?"

3D printing expert speaks at FSU symposium

ITS partnered with the Office of Research to secure a keynote speaker at the FSU 2015 Stacking Layers 3D printing symposium. The speaker, Pete Basiliere, brought expert insight to the symposium from his role as vice president for imaging and print services at Gartner, the world's leading IT research company. ITS negotiated with Gartner to secure the speaker at no cost, saving the university \$22K.

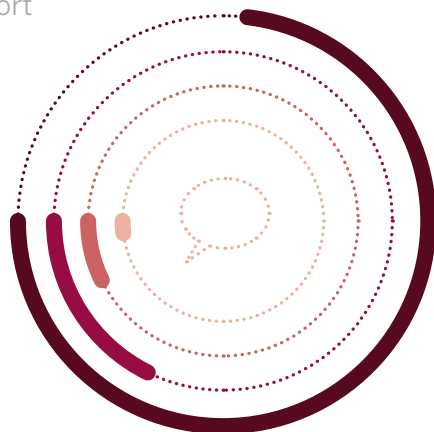
77,091
Service Desk support
requests in 2015

56,657
phone calls

13,498
walk-in, other

5,578
emails

1,358
online chats



8,473
campus workstations
supported by ITS



Financials

ITS manages an annual budget of more than \$46 million to provide critical technology support to Florida State University. As the demand for information technology services increases at a rapid rate, ITS continues the pursuit of scalable funding models to help sustain core services.

2015 Expenses

\$23,274,711

Salaries & Benefits

\$7,800,169

Telecommunications & Network

\$6,440,559

Software Expendable & Maintenance

\$3,641,591

Hardware Maintenance & Supplies

\$3,100,619

Consulting & Professional Services

\$687,344

General Operating

\$523,183

Facilities & Fleet R&M

\$412,212

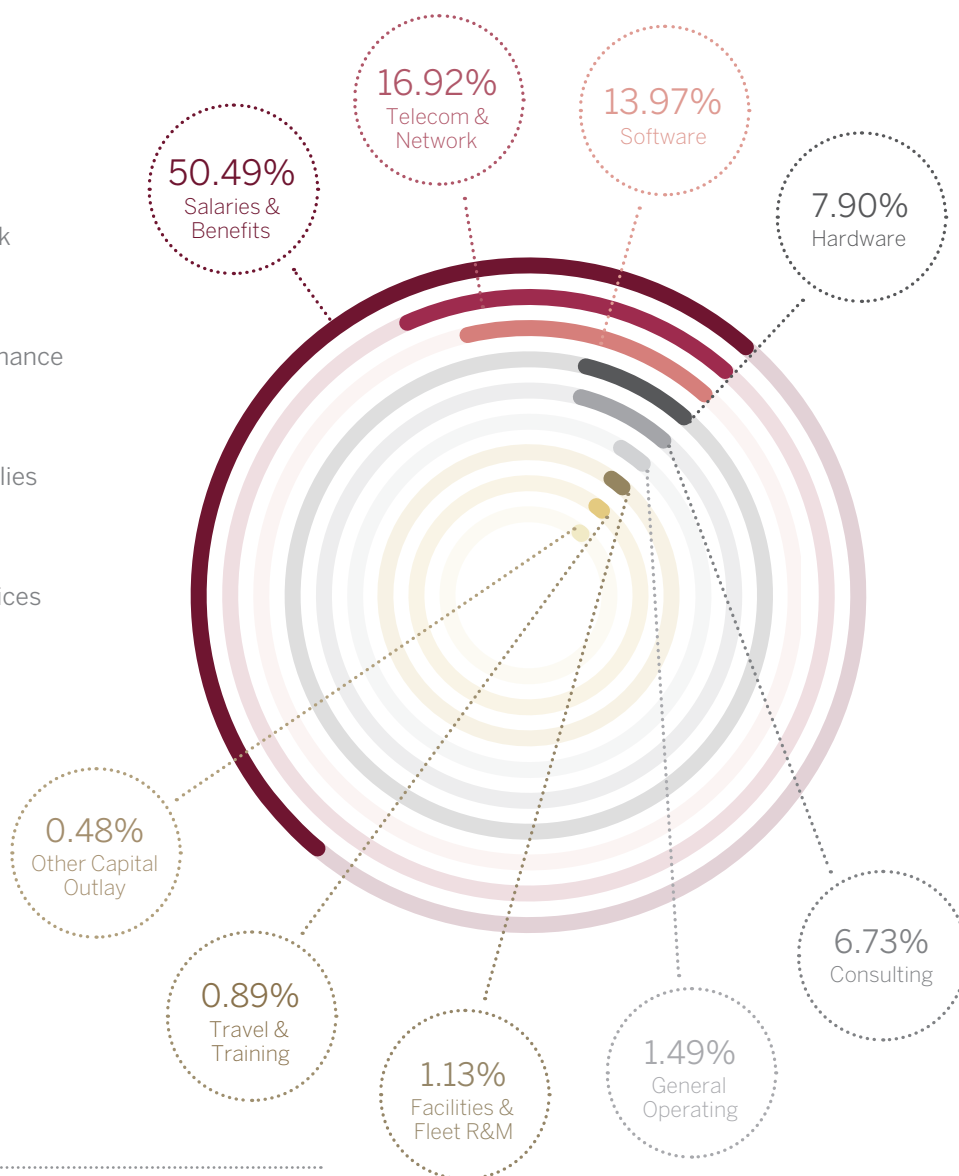
Travel & Training

\$219,687

Other Capital Outlay

\$46,100,073

Grand Total



The Year Ahead

Enable Innovative Teaching and Student Success

As instructors search for ways to incorporate technology into classes with more and more ease, ITS will rise to the challenge. Continuing improvements to technology enhanced classrooms, including lecture capture and online video conferencing, will pave the way for new teaching methods and improved student outcomes in 2016. Working closely with the Provost and Student Advisory Board, ITS will support technologies that continue to enhance student success.

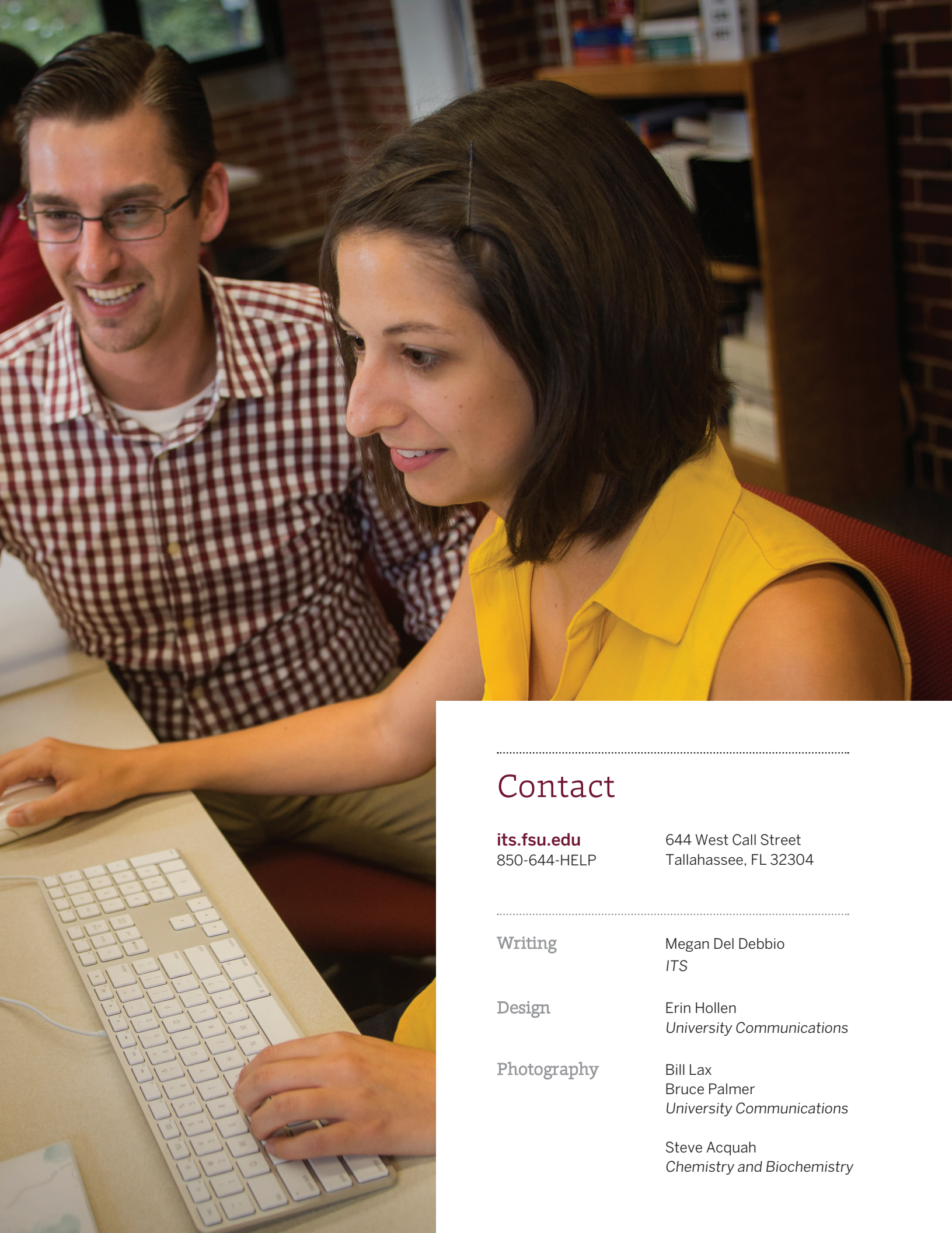
Deliver Personalized Content

The FSU community can look forward to ubiquitous access to university systems as ITS constructs more ways to deliver personalized content. Dynamic modules on the myFSU Mobile app will integrate with existing university systems, allowing students and employees to securely access self-service features and receive targeted push notifications. A new university calendar will introduce an efficient avenue for communicating university announcements and will enable users to easily customize calendar subscriptions and share upcoming events via social media.

Reduce Enterprise Risk

From enhanced security to service continuity, reducing enterprise risk will be at the center of many ITS initiatives in 2016. Projects and outreach will concentrate on strengthening an environment where information is protected and students, faculty and staff are educated on their very important role in maintaining a safe cyberspace at FSU. Concepts such as multi-factor authentication and defense-in-depth will become commonplace in the FSU community's vocabulary, and a disaster recovery facility will enable the university to recover data and IT systems in the event of a natural or cyber disaster. ITS will also partner with the Department of Homeland Security to offer vital cyberterrorism defense and incident response training to technical professionals.





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