

2020/2021 ANNUAL REPORT

Division of Information Technology



A Message from

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Vice President for Information Technology/CIO

The 2020/21 academic year has been unlike any before it. The world has fundamentally changed. The pandemic accelerated the pace of change and the University and IT had to work quickly to develop new processes and refresh the IT Strategic Plan to ensure that we would be able to continue in our goal of fostering student success while keeping our community members safe. These new processes have opened doors to a new digital world and transformed CSUF into a technology-driven campus.

As we emerge from the pandemic, we will hold to the reminder of the importance of flexibility, efficiency, and digital thinking. This past academic year has been filled with virtual support systems and plans for a new dawn of innovation and digital transcendence.

Technology can help bridge the digital divide, innovation and teamwork can inspire us to learn more about our diverse campus community, and through inclusive excellence, we can foster an environment that bolsters everyone in the organization.

I am proud to say the IT team showed dedication and commitment through their exceptional customer service and support, by working at the forefront of digital transformation to provide new academic technologies and ideas to the campus, by supporting a secure and efficient infrastructure, and by providing building blocks that helped bridge the digital divide. It is through their dedication that IT is successful.



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IT's Top Accomplishments

IT is proud of its accomplishments during the 2020/21 academic year. We have created and enhanced vital resources for virtual instruction, cultivated diversity, equity, and inclusive efforts, championed digital transformation, revitalized IT marketing & communications, continued to support student success and GI 2025, enhanced enterprise business processes, reinforced the management and utilization of institutional data, and maintained a secure and compliant infrastructure.

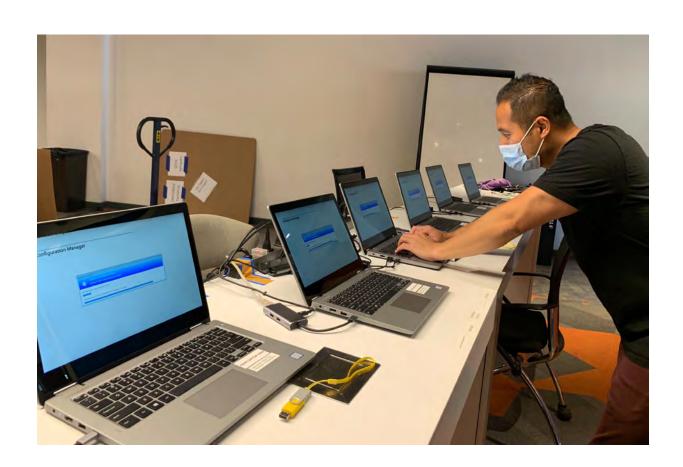
We welcome you to take a look at some of our top accomplishments and achievements during this last year.

GOAL 1

Virtualization due to COVID-19

- In collaboration with campus divisions, IT continued to support virtual offices by deploying 1,642 softphones to departments, enhancing automatic call distribution (ACD) to support remote call centers, and increasing collaboration tools to provide multiple solutions for the campus community
- Virtualized the instructional labs by providing access to software and computing resources available in on-campus computer labs

- Enhanced and implemented the IT campus re-entry plan
- Enhanced our current technology and expanded our inventory of end-point devices to include optimized standard laptops, webcams, headsets, iPads, Apple pencils, and Wacom writing tablets
- In collaboration with the Division of Academic Affairs, IT continued to invest in technology solutions to enhance different teaching modalities such as online, remote, hybrid, and blended



Cultivate an organizational culture to support and advance the diversity, equity, and inclusion vision of the University

- Utilized the IT Budget Guiding Principles to continue to safeguard the University's mission and advance Student Success
- IT fostered inclusive organizational excellence by continuing to offer several team bonding activities and incorporating diversity, equity, and inclusion training for new and current staff members
- Regularly published IT Connects, a team bonding and educational email newsletter, to showcase cultural diversity within IT in a virtual environment.
- Conducted an IT Survey with over 2,350 student, faculty, and staff responses

GOAL 3

Digital Transformation

- In collaboration with the Divisions of Academic Affairs and Student Affairs, IT continued the transformation of student processes by creating a change of academic major process including various forms and continuing to meet with the Digital Transformation task force
- Continued to implement an electronic forms solution

- Continued to deploy and enhance digital signage & interactive wayfinding maps
- Continued to meet Accessible Technology Initiative (ATI) compliance requirements

GOAL 4

Marketing and Communications

- Enhanced the campus-wide IT notification system
- Enhanced collaboration tools to provide multiple solutions for students, faculty, and staff
- Explored methods to improve IT internal and external marketing and communication strategies including the division's diversity, equity, and inclusion efforts and updates in IT newsletters



Continue to deploy technology platforms to support student success and Graduation Initiative 2025

- In collaboration with the Divisions of Academic Affairs and Student Affairs, IT led the High Impact Practices (HIPs) objective and strategy of the University Strategic Plan
- Expanded deployment of TitanNet and TitanNet Smart Guidance Planner
- Implemented Canvas as CSUF's new official Learning Management System (LMS) to replace TITANium
- Continued to collaborate with the Division of Student Affairs to support Tuffy's Graduation Scholars program

- Digital Literacy: Continued the expansion of the Adobe Digital Literacy Program into a wider variety of curricular courses
- As a part of the GI2025 Technology Incentive Program, deployed laptops to eligible first-time freshman
- Upgraded the Titan Degree Audit (TDA)
 System to include the Graduate TDA
- Expanded iTuffy functionality

GOAL 6

Continue to enhance enterprise business processes

- Implemented Salesforce as a communication tool and explored its use with other departments
- Continued to participate in 25Live working groups to discuss best practices and opportunities for improvement
- In collaboration with the Division of HRDI and the Chancellor's Office, implemented the Common Human Resources System (CHRS)
- In collaboration with the Division of HRDI, redesigned the Employee Separation Process to ServiceNow

Enhance management and utilization of institutional data

- Continued to develop and rollout dashboards including the Faculty Student Success Dashboard (FSSD), a collaboration with the College Futures Foundation (CFF)
- In collaboration with the Office of Assessment and Institutional
 Effectiveness, identified requirements
 for on-going dashboard enhancements
- In collaboration with the Divisions of Academic Affairs and Student Affairs, IT established a data governance structure to include WSCUC report recommendations on data security and governance

GOAL 8

Secure and Compliant Infrastructure

- Expanded the telecom wiring projects on campus to include increased eduroam internet connectivity in a social distancing environment in campus parking structures and outdoor areas
- Continued to integrate the University infrastructure with cloud services -Amazon Web Services (AWS)
- Reduced information security risks for the University by conducting regular network scans and patching as well as expanding the use of DUO, two-factor authentication, to students, alumni, and emeriti

- In a collaboration with the Division of Administration and Finance, IT continued to maintain a Payment Card Industry (PCI) compliant environment
- Enhanced IT infrastructure reliability and availability

Diversity & Organizational Excellence

Technology is more than just a laptop or data center. It can be used as an essential tool to challenge the disparities between individuals and groups of people. Access to and knowledge of how to utilize technology can be a major step towards helping bridge the digital divide in academia and later in the workplace.

The Division of IT is dedicated to supporting Diversity, Equity, and Inclusive efforts. We have encouraged and scheduled training sessions, hosted organizational bonding activities, published an inter-divisional newsletter showcasing the different cultures that make up the CSUF IT landscape, and we expanded efforts to learn what we can do to foster inclusive excellence.

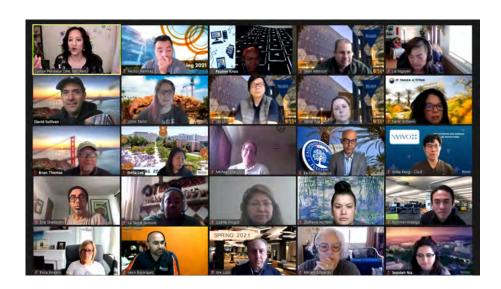
Titans Together

IT participated as a liaison in the University's Titans Together program. These IT ambassadors served as a point of contact for the division and helped promote campus-wide DEI events and as well as create engagement events. Titans Together is a commitment to transparency and accountability in improving the campus climate. This University-wide initiative calls upon campus champions to help spread awareness and advocate for growth in knowledge and understanding.

Trainings/Workshops

To become an advocate for social change, we must first look to ourselves and identify any existing biases, according to Dr. Sumun Pendakur during an exclusive DEI workshop with the Division of IT. Staff attended this workshop and other trainings hosted by the University to learn how to support DEI efforts across the campus and beyond.

Staff were encouraged to attend these trainings, with many completing the Inclusion



Champion Certificate from Diversity, Inclusion, and Equity Programs. By listening and learning, our staff can gain key tenants of communication, advocacy, and understanding.

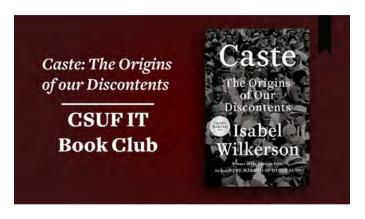
Organizational Excellence Events

Every year, the Division of IT holds various all staff meetings to learn about new projects, celebrate accomplishments and milestones, and embrace what it means to be a part of the IT *Family*. Due to the pandemic and virtual instruction, the Division of IT had to get creative in their planning of virtual events. In addition to quarterly "Lunch with Amir" sessions for staff and management to meet and learn about news regarding the campus and division, IT planned two virtual social events: Summerfest and Holiday Party. These events are typically held in person as a token of appreciation for the hard work and dedication for IT staff. This year's events moved into a virtual realm with some surprising guest appearances.









IT Book Club

After participating in HRDI's Book Club, The Book of Unknown Americans, CSUF IT decided to continue the learning experience by launching an IT Book Club where staff were encouraged to read and discuss the novel, Caste: The Origins of our Discontents by Isabel Wilkerson. Weekly meetings on assigned chapters dove into the comparisons between institutional racism and the caste system.

IT Connects

During virtual instruction, the Division of IT wanted to create an avenue for staff to bond and feel a sense of togetherness. IT Connects was created for staff to share their adventures, recipes, and stories. Through time, this semi-weekly newsletter evolved from a fun weekly IT 'blog from home' to a platform used to educate and inspire.

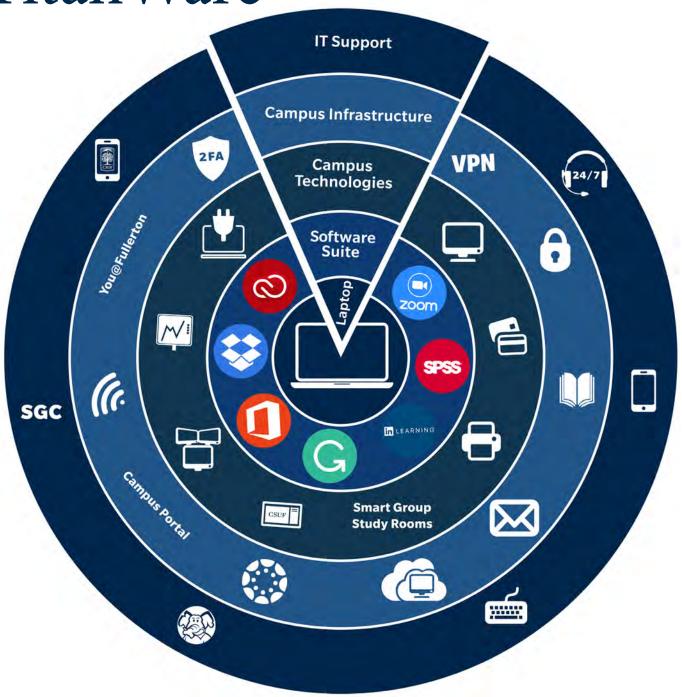


Inside IT: Social Media Campaign

It is hard to not see a department by the many individuals who make up its landscape. However, IT staff are more than just experts in their technical field, they are Titans with their own stories and histories. During the Spring 2021 semester, a social media campaign was created to showcase some of these stories in the hopes of providing followers with a small insight into the lives of the staff they interact with. Through this process, we learned that IT staff hold many roles like student, teacher, musician, photographer, and more. These stories inspire and give a face to the sometimes-unknown facade of IT.



TitanWare



TitanWare is Cal State Fullerton's comprehensive technology ecosystem designed to advance student success. Our goal is to provide students with the solutions needed to thrive academically and in the workplace. TitanWare and laptops were essential to the transition to a virtual environment during the pandemic. In addition, they are vital for the return to campus. IT has worked to communicate this new initiative to new and current CSUF Students with a marketing campaign that includes emails, flyers, digital banners, and social media posts.

Digital Transformation

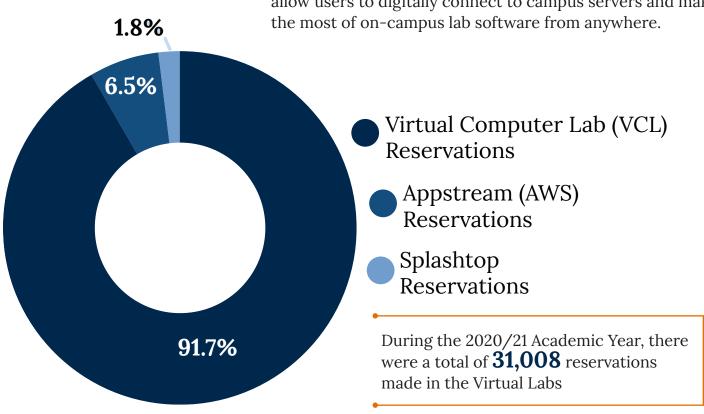


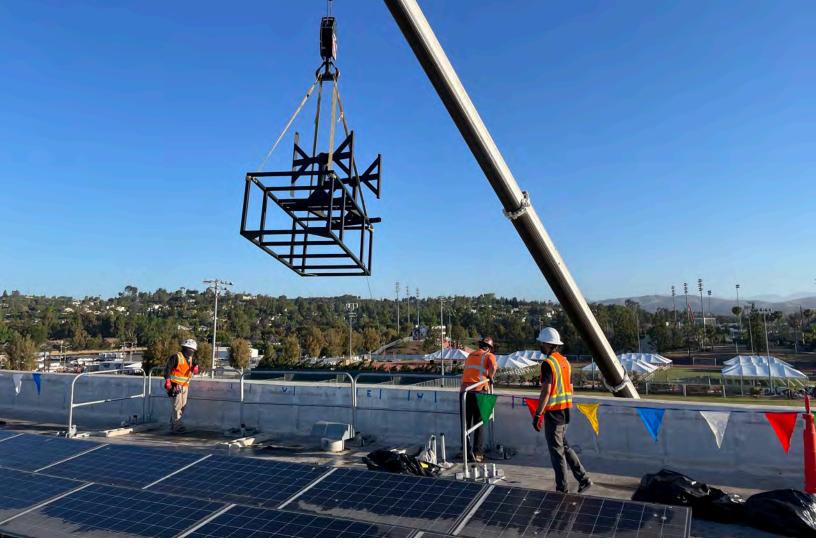
Innovation and digital transformation transcend LED displays and high-performance computers. It is more than just a physical item; it is an idea. An idea that helps build the many blocks of success to create a better future. IT has worked remotely and on campus to continue the journey forward towards digital transformation.

During virtual instruction, there was a need for students, faculty, and staff to have access to on-campus solutions, remotely. IT constructed virtual labs and digitized paper forms to allow users to utilize campus resources from anywhere.

Virtual Labs

The virtual labs were created with Splashtop, Appstream Amazon Web Services (AWS), and Virtual Lab technology to allow users to digitally connect to campus servers and make the most of on-campus lab software from anywhere.





Digital Signage

In collaboration with various campus departments, IT worked to install more digital signs across the campus. The LED screens display vital information to students, faculty, and staff. These campus-wide signs will help in communication and promotion efforts to ensure that the campus is notified and aware of the extensive services and events available to them.

In addition, large speakers were installed on the Kinesiology building roof to be used in conjunction with the digital signs displayed on the building.

Faculty/Staff/MPP Laptop and Computing Strategy

The Division of Information Technology is excited to announce a new laptop and computing strategy for faculty, staff, and MPPs. This computing strategy creates mobile capabilities and provides the flexibility to work virtually during the pandemic and when we return to the campus.

Campus employees will begin the process of replacing their on-campus desktop with a laptop. On-campus workstations will be equipped with a docking station so that employees will be able to plug in and utilize their laptops in multiple modalities.

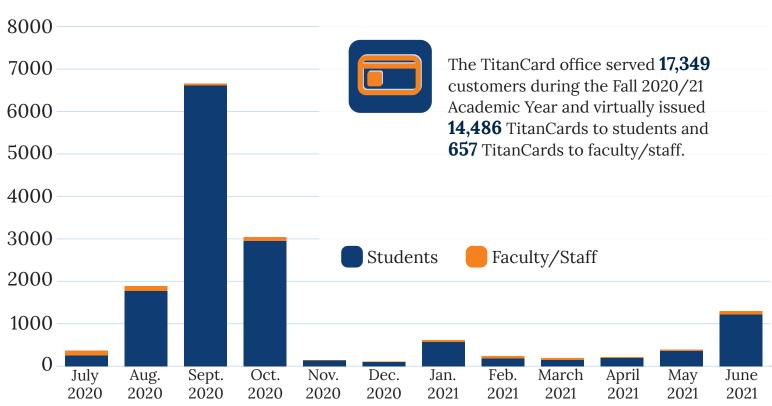
Digitize eForm Process/ TitanCard

The digitization of forms began with the shift to virtual instruction. There was a need to convert and create digital processes for academic forms, typically filled out and submitted in person. IT worked to convert these forms into a digital medium.

In addition, with the utilization of Adobe Sign, TitanCard created a virtual process for applicants to submit their photo for the official University ID card.



TitanCards Issued during the Fall 2020/21 Academic Year



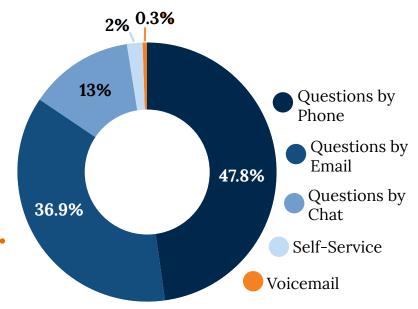
IT Support

The Student and Faculty/Staff IT Help Desks worked to provide 24/7 IT support during the Fall and Spring semesters.

Student IT Help Desk

The Student IT Help Desk received **32,869** inquiries during the 2020/21 Academic Year

Pie chart shows how the Student IT Help Desk received questions



Faculty/Staff Help Desk

The Faculty/Staff Help Desk answered **46,666** calls during the 2020/21 Academic Year. In addition, the Help Desk staff prepped mobile devices, laptops, iPads and desktops for use during virtual instruction.



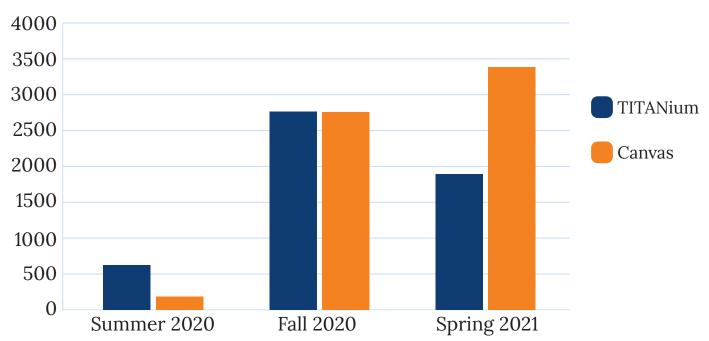


Student Success - GI2025

Canvas

CSUF completed the Learning Management System (LMS) transition from TITANium to Canvas by the end of Spring 2021. During virtual instruction, IT provided faculty and students a series of Canvas workshops to help with the transition.

Visible TITANium Courses vs Published Canvas Courses in the 2020/21 AY



High Impact Practices

Our University strategic plan has committed to creating a transformational Titan experience for all students. As part of this commitment, we are working to ensure all undergraduate students participate in at least three high-impact curricular or co-curricular experiences. These High Impact Practices (HIPs) occur when students are actively engaged in the learning process, participating in transformational learning opportunities inside and outside of the classroom. Over the 2020/21 Academic Year the Division of IT continued the identification and badging of HIPS courses in collaboration with the Division of Academic Affairs & Student Affairs. Throughout the year we worked with:

17,274 Students **284** Faculty **778** Sections

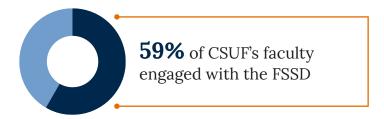
iTuffy Chatbot

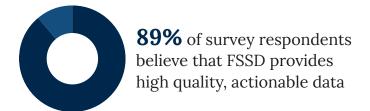
The iTuffy Chatbot serves as the 24/7 resource to campus information. iTuffy can help with viewing parking availability, viewing class and finals schedules, looking up Campus-Wide IDs (CWID), getting directions to and operating hours for campus offices and services and more.

FSSD

The Faculty Student Success Dashboard (FSSD) allows faculty to better understand how they individually contribute to their students' academic performance, progress, and success (e.g. retention, graduation). The FSSD aims to increase awareness of the role faculty play in student success and empowers and motivates them to proactively engage with their students in ways that promote student success across a variety of indicators.

Between July 2020 and May 2021, we tracked login data and conducted three surveys to learn more about how the FSSD has helped contribute to student success.







61% of survey respondents noted that they feel more empowered to support students with data-driven insights

26% of survey respondents felt that FSSD had increased their professional development engagement

Favorite FSSD Features include

- Graded Class List & SOQ
- Access to real data
- My current student stats
- FSSD is user-friendly

- Equity Gap data
- Comparisons of grades across multiple semesters

IT Training, Marketing, and Communication

IT Training & Support

IT Training & Support pivoted to providing knowledgebase articles, online web tutorials, and live online workshops for faculty and students on various technology tools to support remote teaching and learning. The roll out of two-factor authentication in phases to different campus populations and for specific campus services also necessitated the creation of numerous user guides, online videos, and live online classes. Recently the department has expanded its training development methodology by filming in campus classrooms to produce a micro-learning series on using classroom technology tools in support of the transition back to in-person classes.

Marketing/Communications

Strategic marketing plans were reformed to help communicate with the campus during virtual instruction. Salesforce marketing cloud and Sprout Social media planner helped expand IT marketing reach and provide effective communication to the campus at large.

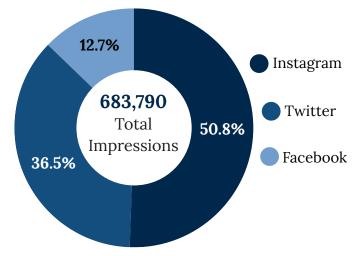
Social media platforms were utilized to promote services and extend communication efforts. Instagram, Facebook, and Twitter served as an extended arm to email and portal message communications. In addition, IT sought to engage with followers through motivational posts, DEI posts, and photos of IT staff at work on campus.



CSUF IT Social Media Followers

37.7% 4,463 Total Followers 53.6% Twitter Facebook

CSUF IT Social Media Impressions





Cybersecurity

Email Gateway Effectiveness

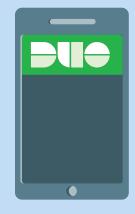
- **98.80%** of Messages Protected
- 99.32% of Attachment Threats Blocked
- **98.67%** of URL Threats Blocked
- 99.47% of Impostor Threats Blocked

Network Threat Report

- **37,496,689** Vulnerability Threats Blocked
- **886,898** Spyware Threats Blocked
- 226,012 Virus Threats Blocked

- 94,368 Phishing URLs Blocked
- 69,302 Malware URLs Blocked
- 11,331 Search Engine URLs Blocked

Between July 1, 2020 and June 30, 2021 we have had over **21.5 Million authentications** via DUO Two-Factor Authentication.



CSUF IT Service Stats

Digital Print Services

Digital Print Services (DPS) helps the CSUF campus community (students, staff, faculty, and guests) with their day-to-day printing needs.

Services Include:

- Full service digital printing
- Business cards
- Posters
- Fliers
- Banners

- Brochures
- Newsletters
- Letterheads
- 3D Printing
- Envelopes and more

While still virtual, DPS produced **297,875** print materials during the 2020/21 academic year!



Accessible Technology Initiative

The Accessible Technology Initiative (ATI) is the effort by the California State University (CSU) system to ensure that information and communication technology is accessible to all students, faculty, staff, and the wider community.

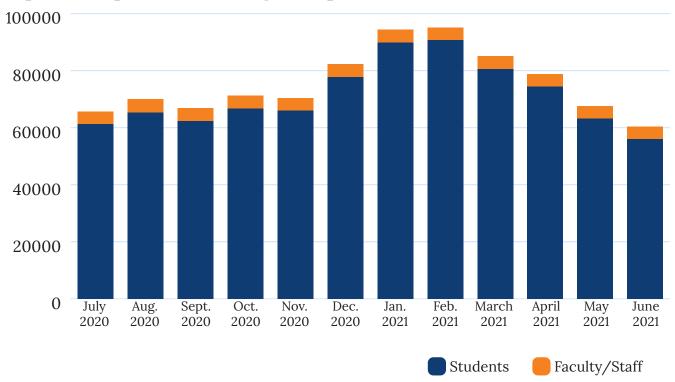
The ATI focuses on three areas:

- **Instructional materials:** documents, multimedia, Canvas courses (LMS), etc.
- **Procurement:** purchases of Information and Communication Technologies (ICT)
- **Web:** the CSUF web environment and domain, as well as web-based ICT, including instructional materials

IT worked to support ATI by conducting:

- **128** ATI Document Remediations
- 293 Accessibility
 Conference Report (ACR)/
 Voluntary Product
 Accessibility Template
 Reviews
- **251** Equally Effective Alternative Access Plan Reviews and Approvals

Unique Campus Portal Logins by Month



Campus Email

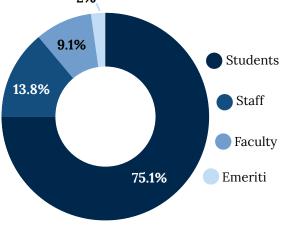
53,387 New Student Email Accounts Created **3,442** New Employee Email Accounts Created

1,954,682 CSUF Email Logins

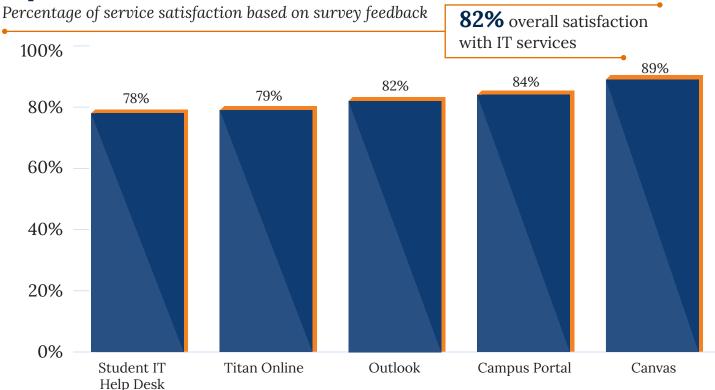
IT Survey Results

The Division of Information Technology values and relies on the feedback of our students, faculty, staff, and emeriti. Every year, we send out an IT Survey to assess how our division can better serve the campus community.

This year, **2,350** students, faculty, staff, and emeriti evaluated IT's progress throughout the 2020/21 academic year.



Top 5 IT Services



Written Feedback

"I have been successfully helped several times before by IT services at CSUF. I trust that they will help me fix any issue I encounter."

"The IT services have been a crucial part of student life and the IT department has fulfilled it's role time and again while not resting on its laurels."

"I've downloaded many of the programs and appreciate the thorough directions"

"I love how quick and helpful the IT team is in assisting the students!"

Re-entry Planning

The Division of IT has been working to provide the campus with the necessary technologies needed in order to ensure a flexible teaching and learning environment. These innovative solutions will provide Titans with the latest in academic and research technology to enhance and support student success.

Classroom Technology

Classrooms have been outfitted to support multiple modalities of teaching and learning. These include cameras and microphones to allow faculty to stream their lectures online for students learning virtually.

Wi-Fi Expansion

Learn and work from all around campus. The Division of IT has increased the number of access points in outdoor locations and has also added access points for eduroam wi-fi connectivity in the campus parking structures.



Research Labs

In collaboration with the College of Natural Sciences and Mathematics, we received a substantial grant from the US Department of Defense to create a High-Performance Computing (HPC) Cluster for the Center of Computational and Applied Mathematics. This will provide our students with the real-world experience to understand the opportunities and challenges associated with computation and big data. Our faculty can also utilize this space to tackle bigger and more complex research programs and experiment with classroom activities that provide students with hands-on exposure to HPC and big data.



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