



SACRAMENTO STATE
INFORMATION RESOURCES & TECHNOLOGY

Annual Report 2023-24



Streamlining Successful Outcomes

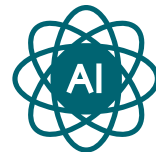
July 1, 2023 - June 30, 2024



Collaborative teams, disrupting old processes, leveraging software and resources, and tapping into AI is helping to ensure equity of access and a tech-forward experience for every Hornet.

Mark Hendricks

Vice President & Chief Information Officer



Reverse engineering the path from graduation to first year is more than simply identifying needs and converting them into strategies. It's an intentional exercise that helps the University's IT division provide campus with optimal tools, training, and resources to support student success.

As we continue to draw from the lessons learned during the pandemic, and explore the possibilities of AI-enabled tools, Sacramento State is committed to strategically breaking down lingering barriers, reducing complexity, automating processes, and empowering students to own their journey through transparent, accessible, and inclusive experiences.

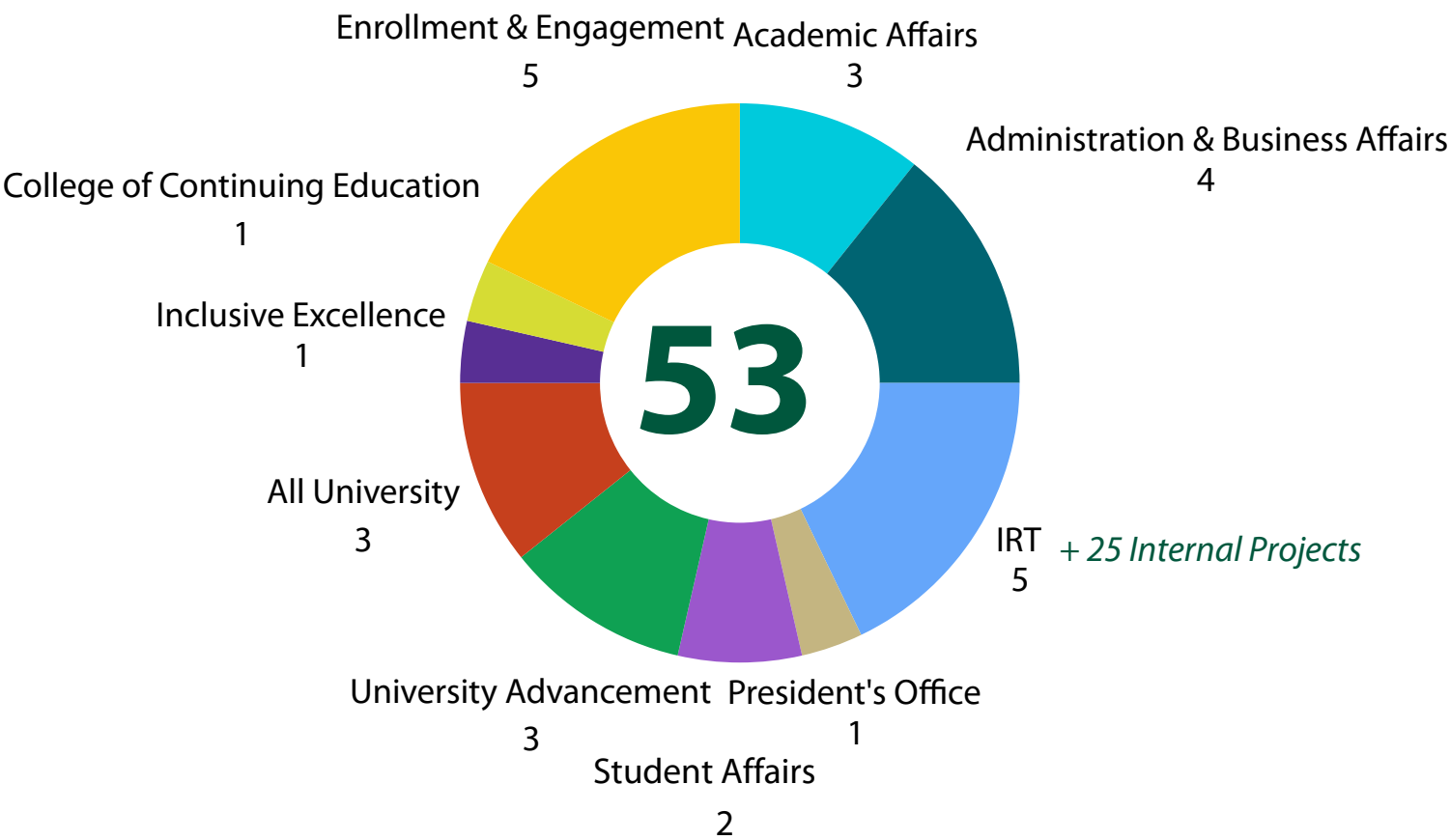
The path of every Hornet should be clearly on the horizon, with people, processes, and technology tools shortening the distance between goals and outcomes.

Thanks to all of you - yes, you! - we'll keep innovating the Hornet experience.

Mark

Campus Technology Projects 2023-2024

From new project requests, to projects spanning years of collaborative technical work, IRT continues to answer the call for campus-wide innovation and deliver despite nimbler budgets and decreased resources



VISION

IRT serves as a strategic, trusted partner and the source for enterprise technology leadership at Sacramento State.

MISSION

IRT partners with faculty, staff, and students to provide essential information technology services that support mission critical activities and innovative technology solutions that facilitate the accomplishment of strategic campus goals at Sacramento State.

IRT Strategic Goals

- 1 Support and innovate within campus imperatives.
- 2 Mature digital transformation strategies to improve student success/experience.
- 3 Unification and standardization of University IT practices and service management.
- 4 Expand internal and cross-functional data-driven decision making.
- 5 Foster justice, equity, inclusion and belonging.

SUPPORT AND INNOVATE WITHIN CAMPUS IMPERATIVES

**LEARNING
& STUDENT
SUCCESS**

**RESOURCE
DEVELOPMENT &
SUSTAINABILITY**

**TEACHING,
SCHOLARSHIP
& CREATIVE
ACTIVITY**

**DEDICATED
COMMUNITY
INVOLVEMENT**

**JUSTICE,
DIVERSITY,
EQUITY,
INCLUSION &
BELONGING**

**WELLNESS
& SAFETY**



LEARNING & STUDENT SUCCESS

SUPPORTING CAMPUS IMPERATIVES

Student e-Lifecycle Project

Quantitative and qualitative data was gathered through campus-wide interviews and comprehensive reviews of technologies supporting student success - from “the now” to the “what’s possible” - across the entire student lifecycle: prospective student, applicant, accepted, confirmed, enrolled, and graduate.

200+

Participating students and
campus decision makers

DIGITAL
SOLUTIONS

STREAMLINED
WORKFLOWS

EASY-TO-USE
SERVICES

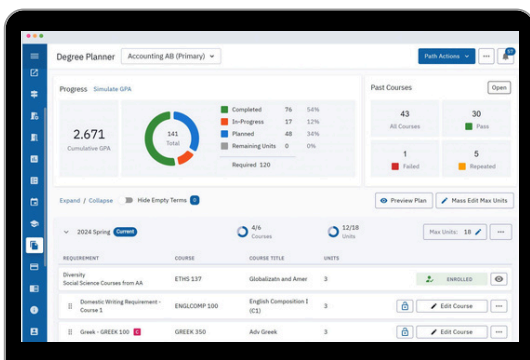
*Digital solutions
are poised to
transform the
student experience
by 2028*

Progress is visible and underway, from a revamped, persona-based upgrade of the student experience on the My Sac State Portal, to a new Degree Planner to synergize the work of students, advisors, and the university to responsively support each Hornet’s journey.

*Coming
soon*

- Student Degree Planner improvements
- EAB early alert and mobile app
- OnBase forms and workflow improvements
- Additional My Sac State Portal enhancements

MySAC STATE



EAB

SUPPORTING CAMPUS IMPERATIVES

Streamlined CSU Apply Process

Nearly 400+ teaching credential applicants apply each year through Cal State Apply - and were processed manually. A new automatic data feed from Cal State Apply to the Credential Module pages eliminates inefficiency, errors, and compliance issues, and delivers an improved applicant experience.



Updated Federal changes to FAFSA and the calculation process used for student eligibility.

*Automation = quicker
admissions decisions
and boosted enrollment*



Automating International (IPGE) Admissions

A new workflow, applicant portal with document upload capability, and automated communications eliminates manual tasks previously necessary to manage international student applications.

Graduate Applicant Transcript Data Integration

Automating the manual transcript/application process is boosting admissions efficiency and accuracy for the Office of Graduate Studies, Undergraduate Studies, International Programs, and Global Engagement.

Transfer Success Pathways (TSP) Project

To reduce barriers for students experiencing academic, financial, or personal hardships preventing them from attending a CSU, eligible first-time, first-year students enrolled in a California Community College who commit to transfer to a CSU within three years can benefit from the TSP Program, which offers dual admission and access to campus resources:

- Sac State Library services
- Transfer Resource Center appointments
- A provisional financial aid letter



SUPPORTING CAMPUS IMPERATIVES



Adjusted Fee Deadline to Boost Orientation Sign-Ups

To boost student applicants signing up for Orientation, the fee deadline was extended to allow Financial Aid disbursements to cover the cost that may impact a student's ability to attend.



Updating Progress to Degree (P2D) Meter

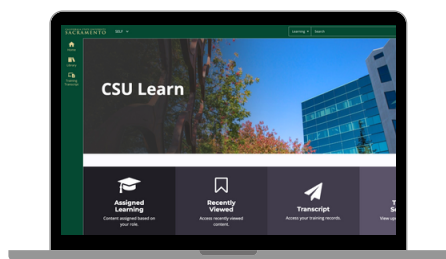
As a precursor to future enhancement plans, a timely update was completed for the P2D and Financial Aid (FA) meters user interface to address the latest system-wide General Education pattern and Federal financial aid changes.



P2D gives an almost real-time view of the progress towards their degree, and is a helpful visual tool to guide their journey

Bursar's Office Student Service Improvements

Collaborated with consultants to implement new system efficiencies and an enhanced user interface to improve the student user experience for accessing, managing, and viewing activity for their university account.



CSU Learn for Students

Students can tap into the academic and professional development resources and pathways within CSU Learn, now consolidating campus training efforts into the same primary system.

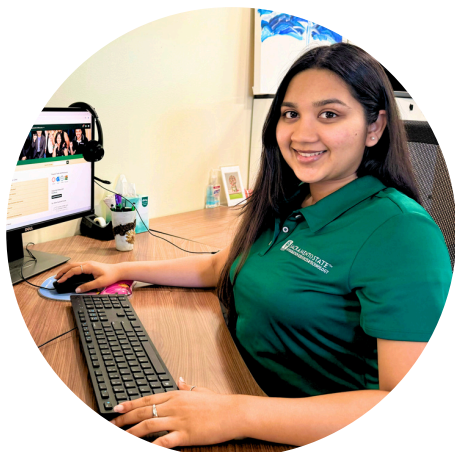


Supporting Tech Equity

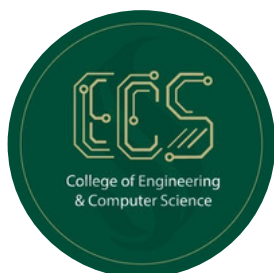


965

Free laptops checked out for long-term use by students in need



VP/CIO Office: Yatri Shah



New IRT Experiential Technology Employment Program

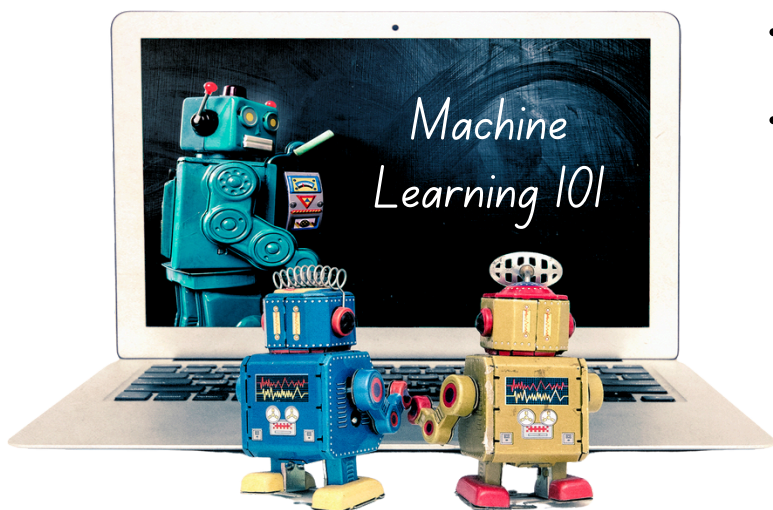
Created in collaboration with IRT, the President's Office, and the College of Engineering and Computer Science (ECS), the IRT Experiential Technology Employment Program is fostering the next-gen technology force by providing an experiential paid practicum where students can do hands-on work in technology fields of interest while also shadowing, observing, and being mentored by university IT professionals.

In its first year, 20 ECS graduate student employment positions were funded within IRT division departments:

- Learning Space Services: Swann Htet and Rohit Tripathi
- Desktop Support: Ram Patil, Aomkar Jagdale, Aryan Mishra
- Downtown "S" Street: Gagan Venkatareddy
- Information Security: Harshith Veeraiah, John-Paul Le, Chankya Baluguri
- IRT Service Desk: Hisham Hussain, Hari Kovuru, Sindhura Ramananda
- Network Operations: Sanjana Jagadeesha and Vishal Shah
- Web & Mobile Services: Ketki Salunkhe, Parth Shiroya, Pragati Chaturvedi, and Kunwar Singh

Machine Learning & AI for Academic Research

Important collaborations with CSU and UC campuses are supporting the development and training for Sac State faculty and students to tap into high performance computing for academic research. These in-demand resources help enhance research productivity and supports student success by providing the tools to apply classroom knowledge to real-world problems.



- Development and staff training through Technology Infrastructure for Data Exploration (TIDE)
- Access to the National Research Platform (NRP) with UC San Diego



SUPPORTING CAMPUS IMPERATIVES

AIRC Furniture Refresh

As the only truly 24/7 study space on campus, the Academic Information Resources Center (AIRC) experiences a high volume of student activity year-round. In partnership with Facilities Management and student employees, all four floors of the AIRC now offer refreshed seating and tabling options for more comfortable and accessible study sessions.



Virtual Computer Lab

Partnered with the colleges to develop a sustainable, equitable, and secure model for software access via a cloud-based Virtual Computer Lab.

- Flexibility and cost savings
- Specialized coursework software for faculty and students from any device, on and off-campus

Classroom Upgrades

IRT, Space Management and Facilities Management refreshed academic technology in IRT-managed campus classrooms and learning spaces:

- Updated, more accessible podium touch panels including shortcuts
- Added a USB-C cable option
- Supports "bring your own device" BYOD for campus guests such as the Renaissance Society



Enterprise Cybersecurity & Risk Management



Protecting Campus Accounts

The 2023 academic year saw a dramatic increase in the number of advanced cyber attacks targeting the campus and a significant increase in compromised accounts.

The campus cyber security team, in partnership with the campus infrastructure team, acted quickly to detect and stop a large number of cyber attacks. Numerous infrastructure hardening/updates ensure that threat actors will be thwarted.



Automating Cybersecurity Detection

To resolve the challenges of monitoring, responding to, and resolving enterprise system compromises, Extended Detection & Response (XDR) was deployed in the server environment to automate responses to system threats, and allow campus IT security professionals to focus on detecting, prioritizing, and resolving cyber attacks.

- Greater visibility and coverage for known and new threats
- Reduces time between discovery and intervention
- Increases confidence in campus infrastructure

Email Firewall Deployment

Working behind-the-scenes, new firewall software invisibly protects against email-based threats such as phishing, malicious content, and impersonation attempts through enhanced spam filtering to address targeted or advanced threats.

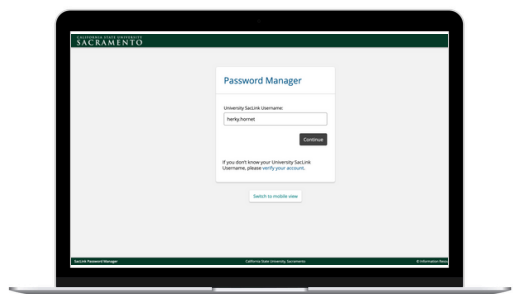


Reduces

- Malicious email message delivery
- Compromised accounts
- Likelihood of financial fraud



Stronger Campus Infrastructure



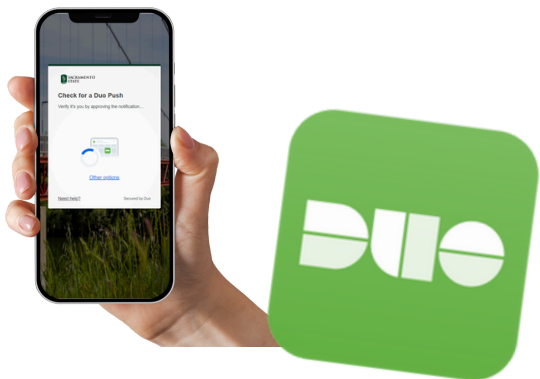
Password Manager Upgrade

Upgraded campus password management to protect against security vulnerabilities and improve the user interface and experience.

Capital Public Radio Risk Assessment

Conducted an IT infrastructure risk assessment of Capital Public Radio (CPR) to identify and resolve operational risks.

- Identified outdated hardware/software; transitioned to campus-configured management
- Retired unused services to decrease risk
- Validated IRT infrastructure hardening efforts for services used across campus



Duo Universal Prompt

The traditional Duo prompt was updated to the new Duo Universal Prompt to support modern authentication protocols.

- More intuitive interface, user experience, and accessibility
- Easier device customization/management

Server Migrations & Decommissions

In collaboration with distributed IT staff, led the migration of campus servers in advance of upcoming vendor OS and end-of-life milestones, and to identify and smart-size overall campus server infrastructure.

58 servers/apps migrated



Red Hat
Enterprise Linux



162

Windows 2012 servers
moved to new servers



Smart, Safe Facilities Management

Network Infrastructure Upgrade

Readied equipment and infrastructure to support the new facilities management network system to ensure campus technology and safety standards were met for implementation.

Automating Campus Space Management

Pilot project integrated campus Tridium HVAC system with the Ad Astra Schedule room management software to automate campus space environments (heating, cooling, ventilation) between uses.



- Reducing Central Plant manual entry workload
- Projected 20-40% decrease in energy consumption per space
- Ensures comfort of our campus community



Pilot configured and tested the interface for approximately 75 zones across Mariposa, Mendocino, and Solano Halls.



Securing Campus Residences

American River Courtyard Locks Replacement

Replaced all off-line electronic door locks for student resident rooms in the American River Courtyard with wireless door locks that meet University security and IT infrastructure requirements.



MATURE DIGITAL TRANSFORMATION STRATEGIES TO IMPROVE STUDENT SUCCESS/EXPERIENCE



DIGITAL TRANSFORMATION

Transfer Course Articulation Workflow

In collaboration with Konica Minolta (the campus vendor for print/scan/copy devices), a Workview application was created in OnBase to digitize and automate the review and approval workflows, with complementary reporting dashboards.

- Significant process efficiencies
- Streamlined and visible workflow for faculty, department chairs, and staff
- Reporting dashboards display requests and key details



A previously inefficient manual task (email and spreadsheets) made collecting metrics difficult



KONICA MINOLTA



73
19

Existing form
enhancements

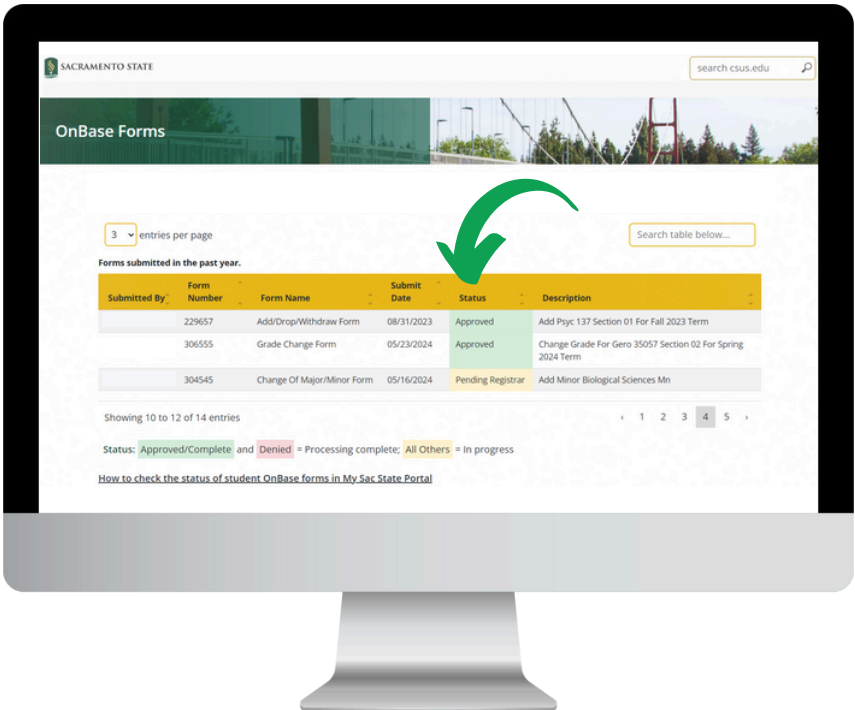
New forms created



Student Forms Status

Student feedback inspired a helpful enhancement aimed at providing near real-time status updates on OnBase forms they submit during processing. This includes forms they personally submit or that were submitted on their behalf.

The new status dashboard was built into the OnBase forms portal providing quick updates on forms status and resolving the need for calls or emails to campus administration for updates.



DIGITAL TRANSFORMATION: ARTIFICIAL INTELLIGENCE

AI Tools to Enhance the Sac State Experience

In partnership with Chief AI Officer Alexander "Sasha" Sidorkin and college IT Consultants (ITC's), IRT has been assessing and implementing secure generative Artificial Intelligence (AI) tools for use by faculty, staff and students.



Academic-focused

- Personalized learning experiences
- Grading and assessment
- Student support



Administrative

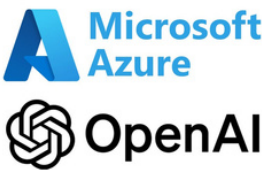
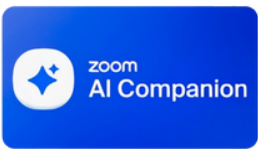
- Business processes and tasks
- Communication and collaboration
- Data-driven insights



National Institute on AI in Society

Partnership with the NIAIS
(academic thought leadership)
and IRT (tools and security) ensure
comprehensive AI analysis

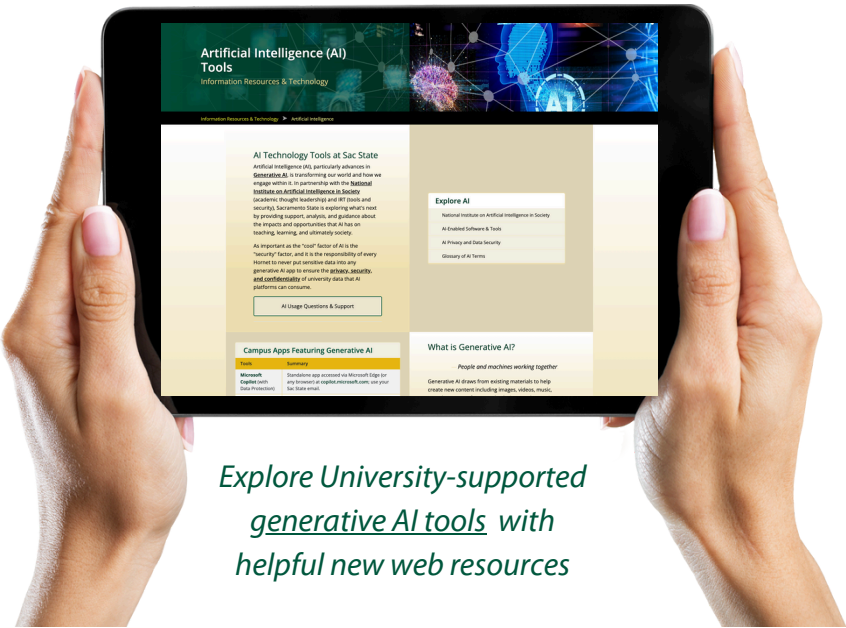
Included or licensed access to campus-supported AI applications



AI Privacy and Security Use Guidelines



Given the university data that AI platforms can consume, IRT drafted responsible AI use policies for privacy and security, which are essential for future university-wide projects including the development of an enterprise chatbot.



Explore University-supported
generative AI tools with
helpful new web resources



UNIFICATION AND STANDARDIZATION OF UNIVERSITY IT PRACTICES AND SERVICE MANAGEMENT



UNIFYING CAMPUS IT

Coordinated Communications Strategy

Collaborating with University Communications to establish a central communication system to better engage the diversity of university audiences.

Phase 1 focused on outreach communications to campus and alumni about athletic events.



While proving cost prohibitive in the current budget environment, a Zoom Phone Pilot project provided insight into the future of campus telecoms.



Campus Digital Sign Expansion

Plans will install new digital signs to improve safety and streamline campus communications.

Upgraded Portal Experience

Findings from the Student e-Lifecycle strategic project informed the first in a series of redesigns for the My Sac State Portal.

- Modern, mobile-friendly design
- Central dashboard with secure, single sign-on (SSO) access to essentials including Canvas, email, and the Student/Faculty/Employee Centers
- Persona-based content, alerts/news ribbons
- Clear language and labeling supporting community and belonging

More you in your my.csus.edu



Future improvements and integrations will continue to bridge the My Sac State Portal with other campus systems

Website Content Refreshes

IRT Web & Mobile Services worked collaboratively with campus areas to audit, refresh, and enhance the usability, design, accessibility compliance, and content accuracy of campus web resources.

- Bursar's Office
- Criminal Justice
- Family and Consumer Sciences
- IRT
- News Website & Research News
- ORIED



Easier to scan/find information



Improved webpage design plus additions of images, accordions, and other content types



Increased accessibility compliance

UNIFYING CAMPUS IT

Collaborative Campus IT Service Management

Expanding the use of the ServiceNow tool to campus partners is increasing the speed, quality, and resolution of campus IT service requests.

Routing issues to responsible teams reduces internal handoffs and communication delays, and allows teams to transparently manage their workloads, access Knowledge Base articles and resources, and escalate issues for triaged team support.



New collaborations include:

- College of Business
- Hornet Launch
- Office of Water Programs
- Payroll
- University Police



Unified Service Delivery on a single platform



Faster resolution, higher customer satisfaction



Decreased staff and resource redundancy



Cost and time savings



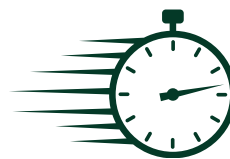
Performance metrics for continuous service improvement

servicenow®



45,768

Service Tickets Received



67%

Improved resolution time

(October 2023 - April 2024)

How can we help?

Search for a Request or Knowledge



With Artificial Intelligence (AI) implementations transforming campus IT, Knowledge Centered Support (KCS) ensures the IRT Service Desk and distributed campus technology support professionals draw from the same curated and real-time updated “playbook” to deliver a consistent, efficient, and quality IT service experience for every Hornet.

4.8/5

Customer
Satisfaction Rating



UNIFYING CAMPUS IT



Synergizing HR Systems

The Common Human Resources Management System Implementation project unifies data and common HR business practices across the 23 CSU campuses. In collaboration with ABA and HR, we transitioned the campus HR platform to the Chancellor's Office CMS/PeopleSoft standard.

New Policy Resource Library

Retired the University Policy Manual webpage and created a one-stop Policy Library allowing users to search and link to current policies.



CCE Server Migration to Campus Data Center

The College of Continuing Education (CCE)'s Moodle instances were migrated from physical servers in Napa Hall to more secure and sustainable storage in the virtual servers in the Campus Data Center.



WELL Membership Management

Replaced an outdated WELL membership system with Innsoft Fusion to meet current information security, PCI, and accessibility requirements.

One Card Upgrade

The campus OneCard was upgraded for security and user enhancements, and is part of a larger strategic project plan to create a true ONE card to manage the variety of campus system and account needs - all currently under separate solutions, including:

- Identification/event entrance
- Campus food purchases, payments, and Hornet Bucks
- Campus building and Residence Hall access and keys



EXPAND INTERNAL AND CROSS-FUNCTIONAL DATA-DRIVEN DECISION MAKING



DATA-INFORMED DECISIONS

Early Alert/Predictive Analytics Supporting Student Success

Implementing the EAB predictive analytics model introduces smart technology to improve academic advising for both advisors and students. Through automating backend analytics and reporting, advisors can proactively support early intervention for students at risk of not succeeding in their academic journey.



All but eliminates the proverbial Magic 8 ball

*Are we meeting
student needs?*

*Intervention
needed?*

*On track for
graduation?*



*Agile data-driven decisions to improve
student reengagement strategies*

National Clearing House Data Hosting

Sac State's Office of Institutional Research, Effectiveness, & Planning (OIREP) grappled with a labor-intensive, self-hosted report generation process used to reengage former students without degrees.

OIREP partnered with IRT to develop automated reporting utilizing existing data resources, both human and technological.

- Streamlined data storage in a highly available environment
- Immediate data updates and time savings

University Donor Database

Whether in the office or in the community, the new Ellucian Advance Customer Relationship Management (CRM) system will transform University Advancement operational tasks:

- Improved data accuracy and real-time fundraising insights
- Alerts and workflows, personalized outreach, and analytics to identify new targets
- Track constituent engagement to segment, refine, and prioritize donor and prospect marketing
- Secure contributions processing



FOSTERING JUSTICE, EQUITY, INCLUSION AND BELONGING



Inclusive Experiences

Preferred Name Added to Diploma Application



Further supporting inclusive functionality in campus systems by adding a preferred name option for graduate diplomas to foster belonging.

ASL Interpreter Request Form



A new centralized online form simplifies requesting American Sign Language (ASL) interpreting services for campus events, courses, and meetings.

Accessible + Equity-Focused Digital Experiences



85.2%

Accessibility Score
WCAG 2.1 AA level standard



DEI Self Assessment

IRT staff participated in a Culture and Needs Assessment survey in coordination with Inclusive Excellence (IE) to gather a baseline among the team about DEI knowledge, values, beliefs, practices, barriers, successes, and opportunities.



97

 Employees participated

The adoption of using pronouns is so helpful as we evolve from a face-to-face work world to an online/texting work world.

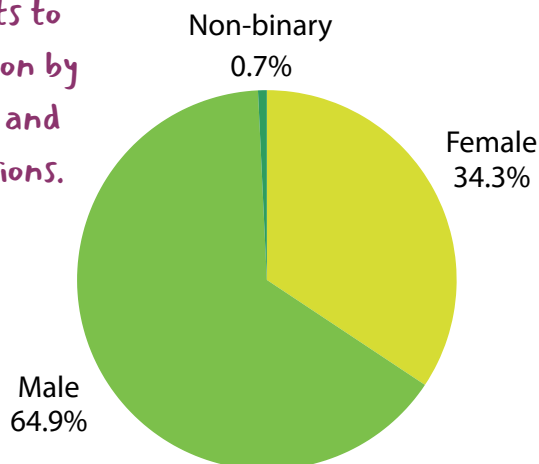
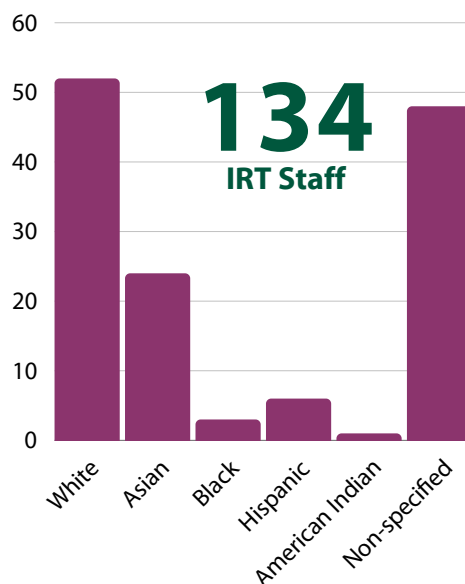
In the past couple of years, our department successfully implemented inclusive hiring practices aimed at increasing diversity within our team and also at the leadership levels.



IRT has made intentional and consistent efforts to increase representation by women in leadership and highly technical positions.

Diverse IT Team

IRT is committed to reflecting and serving our diverse campus community.



IRT Leadership



Mark Hendricks
Vice President & Chief
Information Officer



Peggy Kay
AVP, Academic Technology
& Campus Engagement,
and Deputy CIO



Hema Manickavinayaham
AVP, Planning and Digital
Transformation



Nathan Zierfuss-Hubbard
Chief Information
Security Officer (CISO)



Nick Sladojevic
Senior Director,
Infrastructure & Operations



Isaac Cabrera
Director, Enterprise
Systems & Data
Services



Kelli Hunt
Director,
Customer
Services



Matt Kay
Director, Academic
Technology
Services



Nadya Lucas
Director, Project
Management
Office



Charlene McKoy
Budget
Analyst



Greg Porter
Director, Campus
Applications



Jesseca Sanchez
Executive Assistant
to the VP/CIO & IRT,
Administrative Analyst



Jennifer Sonne
Director,
Digital User
Experience



Courtney Zuke
Communications
& Marketing
Program Manager

Campus IT Governance

Unified technology strategy is achieved through formal technology governance groups comprised of delegates from every campus division. Under the umbrella of the IT Advisory Board, specialty governance groups collaborate to guide, recommend, and advance campus technology initiatives and innovations.

IT Advisory Board

Academic Information Technology Committee (AITC)



Accessible Technology Initiative (ATI)



IT Procurement Governance



Web Content Advisory Group (WCAG)



IT Collaboration & Standards



Data Security & Records Retention



Teresa REMEMBERING Palmer

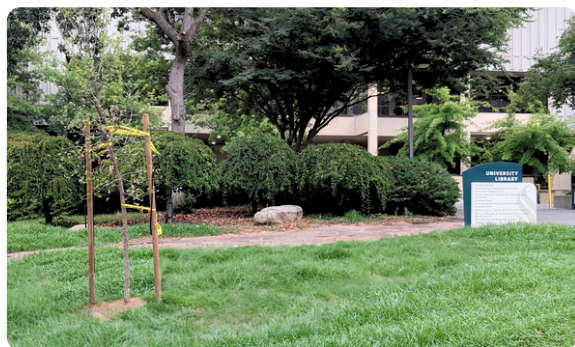
1982 - 2023



After a truly courageous two-year cancer journey, our good friend and irreplaceable pillar in the Sac State IT community passed away on August 7, 2023.

Teresa's legacy shines in so many facets of the Sac State technology experience. For 18 years, she brought her passion and insights for technology's transformative role in education to her life's work at the university. Twice "Made at Sac State" she drew from her student days to create user-focused solutions across a host of coordinator and leadership roles.

Teresa's dedicated and approachable leadership focused on ensuring the success of faculty, staff – and closest to her heart – students



To each project, meeting, and conversation, Teresa brought intelligence, institutional and industry knowledge, and calm. Her unflappable work ethic raised the standard of what IT could – and should – be.

We honor her legacy in our daily work, and in visible and enduring ways, such as the Teresa Palmer Legacy of Service Scholarship, and with an oak tree planted in her memory between the Library and AIRC building, where she spent many an hour as both a student and as a campus technology leader.

Explore IRT



SACRAMENTO STATE
INFORMATION RESOURCES & TECHNOLOGY