



EMPOWERING LEGENDS

The University of Alabama Office of Information Technology Strategic Plan Accomplishments 2019-2022



Office of Information Technology

OIT Goals

The Office of Information Technology Strategic Plan aligns with the UA Strategic Plan as we work to support teaching, learning, research and operations at The University of Alabama.



Teaching + Learning

Support students and faculty with instructional technologies and services to ensure successful undergraduate and graduate learning experiences.

Transitioned Blackboard Learn from managed hosting to SaaS to provide greater scalability, more frequent updates and less downtime.

Implemented Blackboard Ally to help transition course materials into accessible content.

Replaced legacy tools with innovative and robust instructional technologies.

Developed an extensive knowledgebase to promote streamlined access to support resources for faculty, staff and students.

Quickly and successfully began supporting emergency remote instruction during the COVID-19 pandemic through implementation of new tools and partnerships.

Responded to the impact of COVID-19 on classroom instruction and computer lab use by installing new technology as well as providing protective covers and sanitizing supplies.

Implemented a messaging system within Blackboard Learn to inform instructors and students of important content.

Installed state-of-the-art audio/visual technology in the greatest number of academic and other spaces to date. Accomplished in record-breaking time resulting in increased reliability and standardization.

Deployed desktop imaging and remote management software for labs and computers across campus.



Research

Provide IT resources and personnel to support and increase the UA's productivity and innovation in research.

Provided research computing consultation and vendor management services to Alabama research institutes including the Alabama Water Institute, Alabama Life Sciences Institute and the Alabama Transportation Institute.

Provided co-PI or material support for three successful NSF CC* grants totaling \$530,000.

Completed major upgrade of UAHPC cluster infrastructure with new switches/optics capable of 40Gbps.

Implemented a 680TB Panasas Ultra storage array for HPC research data storage.

Partnered with researchers on a successful NSF CC* grant, which awarded \$400,000 for a new 1600 core 25 node, 5 NVIDIA A100 GPU cluster (CHPC) for AI/Machine Learning and computational research.

Provided Open Science Grid connectivity to CHPC.

Moved UAHPC, CHPC, and College of Engineering HPC clusters from Gordon Palmer data center to Ridgecrest secondary data center to provide adequate power for projected cluster growth while a permanent hosting location was explored.

Completed project to select HPC long-term colocation hosting facility. Selected DC BLOX, secured administration and faculty backing, built-out UA System Regional Optical Network to colocation facility, and moved HPC clusters and storage array.

Expanded HPC support team to include a GIS engineer and launched a new Esri ArcGIS cluster to support researcher and academic needs for mapping and analysis of geospatial data.



Security + Risk

Secure and protect UA's technology assets and the campus community through dynamic cybersecurity practices.

Increased scope of security services offered to better protect UA's hybrid and remote workforce.

Developed a new, in-house cybersecurity awareness training that is required for all UA employees.

Migrated users to Modern Authentication with Duo two-factor in Microsoft 365.

Migrated all OIT supported email, including students, faculty and staff, to Microsoft 365 and utilized Microsoft security tools.

Added External labeling to email to alert the UA community to messages sent from external sources.

Implemented an internal cyber threat intelligence program to better identify potential threats.

Created and enforced UA's Information Classification Policy to identify and protect sensitive information. Developed and streamlined UA processes using various workflow and business automation tools, including the addition of robotic process automation (RPA).

Initiated a program to establish and maintain a NIST 800-171 compliant data center for the protection of controlled unclassified information. Implemented better monitoring tools to provide metrics and monitoring of applications and hardware.

Established a CMMC compliant cloud research enclave for the protection of Department of Defense controlled unclassified data. Supported critical campus applications including Banner, myBama and developed many new custom applications in response to COVID-19.



Enterprise Architecture

Establish effective procedures, processes and services as the foundation for UA student, faculty and staff technology use.

Consolidated Finance & Operations Information Technology into OIT to better leverage technical resources, including decommissioning the ASB data center and leveraging the Ridgecrest data center for enterprise services.

Supported more than 11,000 wireless access points to provide wireless connectivity to campus.

Consolidated OIT-supported email into one Microsoft 365 cloud environment.

Implemented DNA Spaces to review insights about devices connected to wireless access points.

Increased support and staff for reporting and analytics.

Replaced firewalls with new hardware models.

Created a container environment for custom developed applications to allow for better processes, more efficient resource usages and to prepare for a transition to cloud architecture.

Developed a 5-year cloud strategy roadmap to plan and prepare for a transition to additional cloud services.



User Experience

Establish a consistent and reliable user experience for OIT services, tools and technologies.

Decommissioned UA's legacy phone system and migrated all phone service to VoIP.

Transitioned all UA students, faculty and staff to use the eduroam wireless internet network.

Developed a new streamlined and searchable myBama driven by student feedback.

Increased level of customer satisfaction experience with the IT Service Desk.

Migrated all OIT supported email, including students, faculty and staff, to the Microsoft 365 cloud environment.

Implemented tools to streamline machine imaging.

Implemented an AI-powered chatbot on the OIT website to enable more interactive troubleshooting.

In response to the COVID-19 pandemic, supported UA's hybrid and remote workforce with IT services including an expanded VPN.

Replaced ticketing systems to provide cohesive customer service across the organization.



Community + Collaboration

Encourage engagement within OIT to foster an inclusive and team-oriented work environment, while building community between OIT and students, faculty and staff to understand and meet technology needs.

Became an Adobe Creative Campus, offering Adobe Creative Cloud software to all UA students.

Established the IT Forum to create consistency in IT practices at UA while building community among IT practitioners.

Launched new OIT website and YouTube channel to better inform campus community of IT services.

Expanded OIT Leadership team to represent all areas of the organization.

Established monthly meetings of all OIT supervisors to create consistency in management practices and build community among OIT teams.

Established monthly internal learning sessions for OIT team members to learn from one another.

Established bi-annual organization-wide meeting to reinforce OIT's vision, mission and values with all team members.

Established regular meetings with key customer groups including the Faculty Senate, Student Government Association and Graduate Student Association.

Piloted a remote work project, offering hybrid working arrangements to IT staff where applicable.

Offered virtual and in person presentations and workshops for UA students, faculty and staff sharing IT best practices.

