

Clemson University Uses Hiperwall for Instruction, Research, Security and Signage

Five Separate Hiperwall Video Walls and Distributed Visualization Systems Fulfill Various Purposes on Campus to “Get the Job Done”



Clemson University's Hiperwall video wall system located just inside entrance of the university library provides dynamic and instantly changeable information for students and faculty, and serves as an impressive welcome sign for visitors and guests.

Challenge

Clemson University had used large-format, individual monitors to display information but research applications and high-resolution content, and the need for more versatile ways to display that content, were demanding larger display technology. It was time to evaluate video wall technology.

Solution

In 2013, after researching various video wall options, Clemson University purchased and installed its first Hiperwall video wall system. Hiperwall proved easy to install and use, and it offered the highest resolution available. The university purchased two more Hiperwall video walls that same year. In 2015, two additional Hiperwall video walls were added, for a total of five.

Results

Clemson University has found Hiperwall, a software-based video wall system, to have significant advantages over individual displays. Hiperwall can display information to a large group of people at once. It is flexible, ease-to-use and has far superior resolution capabilities compared to other solutions. Hiperwall enables users to study high-resolution content without losing clarity. It simply “gets the job done” for five separate uses on campus: digital signage in Cooper Library, instruction in the Brown Digital Resource Lab (DRL), research in the CCIT Security Operations Center and the CITI Creative Technology Research Lab, and communication projects in the Social Media Listening Center.



A student gives a presentation using the Hiperwall video wall system located in the university library's Brown Digital Resource Lab. In the lab, Hiperwall's unmatched, highest-resolution capabilities have been key to enhancing instruction, learning and research.

Background—Clemson University

Ranked as the 21st best national public university by U.S. News & World Report, Clemson University is a science- and engineering-oriented college dedicated to teaching, research and service. Founded in 1889, the campus sits on 1,400 acres in the foothills of the Blue Ridge Mountains, along the shores of Hartwell Lake, in South Carolina. Clemson is an inclusive, student-centered community characterized by high academic standards, a culture of collaboration, school spirit and a competitive drive to excel.

“Hiperwall’s resolution really makes a difference,” said Barbara Weaver, Deputy Director of CITI for Clemson University. “It’s a very important part.”

Challenge

Clemson University had used large-format individual monitors in the past, but they presented limitations when attempting to have a large group see the content at the same time. The university determined that a video wall system was needed, and learned about the ease of set up, industry-leading resolution and flexibility of content management offered by Hiperwall. “At Clemson University, our attitude and approach to technology is to always be open to new and innovative possibilities that may be brought to us by emerging technologies,” said Barbara Weaver, Deputy Director of Cyber Infrastructure Technology Integration (CITI). “We were excited to purchase Hiperwall and put its capabilities to the test.”



A Clemson University alumna, the Clemson Tiger mascot and others are shown celebrating the grand opening of Clemson University's Social Media Listening Center in 2013. Hiperwall video walls are used in the center to display real-time social media communications.

Solution

In 2013, Clemson University purchased a 2 x 4 Hiperwall video wall system comprised of 55" NEC ultra-narrow bezel displays for the entrance of the university library. The video wall system proved to be easier to use than the university's existing video wall systems. As a result, four months later Clemson University purchased two more video walls, a 3 x 5 video wall with 46" NEC ultra-narrow bezel displays for the university library's Brown Digital Resource Lab, and a 2 x 3 video wall of 55" NEC ultra-narrow bezel displays (with the addition of two, 1 x 1, 70" displays that are located next to and incorporated into the video wall system) to create the new Social Media Listening Center (SMLC). In 2015, a

fourth video wall system was added, a 2 x 3 wall of 55" NEC ultra-narrow bezel displays to create the university's CCIT Security Operations Center (SOC). Also part of the SOC is a single 80" NEC E series display and an 8500 Lumen Panasonic projector with an ultra-short throw lens. Both are part of the Hiperwall system, but like the SMLC are located physically separate from the 2 x 6 array. The projector illuminates a wall of electro transparent glass that is used in a SOC viewing room. It is a "now-you-see-it, now-you-don't" effect. A fifth Hiperwall video wall system, a 2 x 3 wall with 46" NEC ultra-narrow bezel displays, was purchased two months later in 2015 for the new CITI Creative Research Technology Lab.

"Flexibility is Hiperwall's greatest attribute," said Chuck Heck, Manager of Clemson University's AV Systems Design and Engineering department. "If you need to make an ad hoc change to the content on the wall—"bang"—it's up. There are many uses for video walls on our campus. Hiperwall gets the job done."

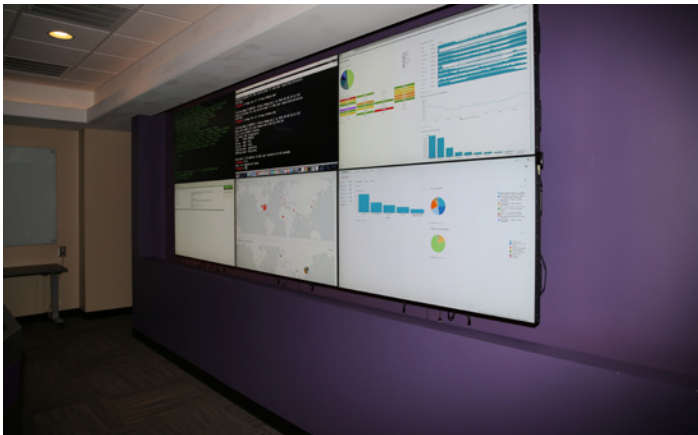


Clemson University's Social Media Listening Center.

Results

Hiperwall is video wall software that was engineered to provide greater usability and unmatched, superior resolution. As a result, at Clemson University, it has proven to be easy to use and has provided opportunities for staff and students to teach, research and learn using the greatest high-definition resolution available. "Any time you can enlarge an image to improve clarity, there are benefits in the classroom and in the lab," said Barbara Weaver. "Hiperwall's resolution really makes a difference. It is a very important part."

For an overview of the uses and benefits of the five Hiperwall video wall systems on Clemson University's campus, please see the table that is available on this page.



Clemson University's Security Operations Center pictured before its grand opening.



Clemson University's CITI Creative Technology Research Lab (currently undergoing construction).

HIPERWALL VIDEO WALL	USES AND RESULTS
University Library	• Used for large-scale digital signage • Displays news, announcements, twitter feed and other information • Serves as an impressive display for prospective student tours
Brown Digital Resource Lab	• Used for special classroom instruction (various subjects) • Enables visualization of fine details, such as for identifying plants by their leaf veining in botany class • A faculty member discovered never-before-seen artifacts in ancient manuscripts and research is underway
Social Media Listening Center	• Used for streaming real-time social media communications • Draws media attention for students and faculty during significant national news stories • Facilitates real-world experiences for students in the Department of Communication Studies
CCIT Security Operations Center	• Used for research by faculty, IT staff and select students for testing security products, performing security software development, and monitoring global IT threats • Enables students to specialize in IT security and boosts their hiring prospects in an in-demand field
CITI Creative Research Technology Lab	• Used by undergraduate and graduate student interns for creative research • Some projects will involve big data and social media