



Three dimensional scanned view from inside the cottage, showing all three rooms and into the attic.

Cutting Edge Technology and Houston History Meet at The Heritage Society

On August 5, a team from Smart MultiMedia, Inc. visited The Heritage Society to collect High Definition 3D Scanning (HDS) documentation of the society's most recent addition to Sam Houston Park, the c. 1866 4th Ward Cottage, which was moved from 809 Robin Street in 2002. The technology of HDS documentation is being used across the globe to digitally document such historic sites as Pompeii in Campania, Italy; Rapa Nui (Easter Island) in the Province of Chile, Chile; and Mount Rushmore in South Dakota.

HDS Documentation utilizes 3D laser scanning, high dynamic range panoramic photography and traditional surveying techniques to capture a comprehensive virtual representation of a structure, object or environment. The 3D laser scanner collects highly accurate surface data in the form of XYZ points, and is often referred to as a "point cloud" due to the density of points within each scan. The high resolution photographs are then overlaid onto the point cloud, adding realistic color and detail. Utilizing the scanning and photography dataset, a virtual tour of 4th Ward Cottage viewable via the internet, a 3D hologram of the cottage, and exterior plan and elevation drawings of the each façade of the cottage will be created.

The data captured through HDS Documentation of 4th Ward Cottage will provide the most accurate representation of the cottage in its current

state. Elements such as the ghost of a former staircase, the trap door leading into the attic, and beams with evidence of mortise and tenon jointure will be captured during the documentation process. The Heritage Society will use these resources to guide their efforts to restore, preserve, and interpret 4th Ward Cottage.