

Data-driven Visualization of Chichen Itza for Immersive Full Dome Theater

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In this short talk, we'll discuss a digital documentation project at the pre-Columbian site of Chichen Itza, Yucatan, Mexico. Chichen Itza, undisputed as the most iconic ancient Maya site, is a meeting of styles and peoples: post-classic Maya, Tula, and 'Mexicanized' Maya monuments crowd together in a single site. From the richly detailed Puuc structures to the spartan but imposing Pyramid of Kukulcan, Chichen Itza presents an excellent opportunity to study variations in Maya building over time. The primary goal our documentation project was to provide humanities scholars with access to accurate spatial and photographic data from the site under study, including comprehensive recording for highly detailed sculptural elements. A secondary goal was to be able to present the site in immersive venues such as 'full dome' theaters commonly found in science centers across the globe. In order to fulfill both requirements, we created open source tools to share data and simplify collaboration. In the talk, we'll briefly convey our documentation process, note how it evolved over time, and suggest in what ways humanities researchers could benefit from our experiences.