Scan-to-BIM of the UCF Rosen Center: Combing NavVis SLAM Data with TopoDOT Feature Extraction Tools

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SUMMARY

Capturing detailed information and characteristics of a survey project site can be critical to the success of a project, but the challenges don't stop there. Efficient reality capture methods combined with advanced feature extraction tools can enhance your ability to create a digital as-built of your project. Come learn how firms like GPI Geospatial, Inc. are able to utilize their NavVis VLX scanner and SLAM technology to collect highly detailed lidar point cloud and imagery data of their projects, and how TopoDOT's modeling tools use this point cloud and imagery data to create Building Information Modeling (BIM) and digital twin products. GPI Geospatial's team is able to use the NavVis VLX to efficiently capture data for indoor and outdoor projects that is tied to survey-grade control points and then able to be hosted on a web-based platform for ease of analysis. The resulting point cloud data is then turned into a rendered 3D BIM model using TopoDOT feature extraction tools. Through the scanning and BIM modeling of the UCF Rosen College, we aim to show an efficient 3D As-Built surveying project cycle.
