

Using Large Scale Aerial Images for 3D Visualizations

Abstract

Three dimensional modeling is an expanding discipline. In the last decade, it has moved into the mainstream with Internet giants Google and Microsoft debuting their respective internet models. While these models have shown the possibilities of 3D GIS models, they are at the landscape level. Many of the other models currently available use programming to create the models. The goal of this research is to create accurate 3D visualizations and animations using commercially available software and imagery for a large scale visualization. To conduct this study, images and an elevation model were obtained to cover Marion Sansom Park in Fort Worth, Texas. The existing trail was located using GPS and draped over the scene. Trees and bushes were added for realism. The result was not a highly accurate model, but a first step in an evolving process. Future work will incorporate the rapidly expanding library of three dimensional botanical models available in the public domain.