DATA-DRIVEN 3D SHPAE MODELING

Yongjian Xi

Dr. Ye Duan, Dissertation Supervisor

ABSTRACT

3D shape modeling is essential for computer to understand our real world. So far, 3D shaping modeling is still an open issue. There are too much raw data around, but there is no uniform or standard way to translate them for computers. My work is an attempt to build a bridge from real world to virtual world. We proposed several algorithms to process three major types of raw data, including volumetric data, pointscloud and multi-view images, and try to translate them into triangulation mesh, which can be understood by almost all of applications manipulating 3D object in computer.