

Techniques for Object Reconstruction from Point Cloud Data and Applications

In our days the society is increasingly reliant on digital means of exploiting the physical reality, and thus it is increasingly important to acquire such a model. Through various techniques in Computer Vision one can reliably place some discrete number of points from a sequence of images in a 3D space, hence obtaining what is called a Point Cloud. Point Clouds themselves are however just an intermediate step for reconstructing a model of the incident reality, which implies finding a topology that best fits that cloud. This talk aims to present a few techniques for Object Reconstruction / Mesh Generation from Point Cloud Data and some context on the applications of such techniques and how said data may be acquired.