

CSC 570Q

Study guide for:

Lecture on acquisition

Recent progress in coded structured light as a technique to solve the correspondence problem: a survey, Battel et al

A Volumetric Method for Building Complex Models from Range Images, Curless & Levoy; Siggraph 1996 (acquisition)

Real-Time 3D Model Acquisition, Rusinkiewicz, Hall-Holt & Levoy, Siggraph 03 (acquisition)

(Class/Battle) Make sure you understand in general how passive stereo works, how does active stereo works, what calibration is, what correspondence is and what a range image is. Understand in general how a structured light scanning process works.

(Curless and Levoy) Be able to summarize the general stages of their proposed reconstruction algorithm. In the following figure what is \mathbf{d} (in your own words) and what part of the algorithm is this figure describing (i.e. what is happening in this figure and why is this stage necessary to reconstruct the surface?).

