

Calibrating a Fisheye Lens Camera

Camera calibration is the process of computing camera parameters and is an important problem in computer vision. Multiple calibrated cameras can be used to accurately recover 3D locations of objects. In the context of the Distance Learning project, fisheye lens cameras are used, as their wide field of view allows the instructor to practically walk without restrictions in the classroom. A fisheye lens camera model is presented, and a simple two-step procedure is described that accomplishes the calibration task with precision comparable to results obtained with much more complex methods.