

## **3D Point Cloud Data Registration Algorithm Based on Augmented Reality Technology**

### **ABSTRACT**

Point cloud data registration is one of the key steps in 3D laser scanning data processing. At present, point cloud data registration has the problems of error and is too much time-consuming. In order to solve the above problems, a 3D point cloud data registration algorithm based on augmented reality technology is proposed, and the 3D data registration model is constructed by combining augmented reality technology, build the evaluation index of 3D point cloud data registration, and carry out the initial registration of 3D point cloud based on the evaluation index. The experiment shows that the 3D point cloud data registration algorithm based on augmented reality technology can more effectively improve the accuracy of data registration and avoid the problem of low efficiency of data registration in practice.