A survey on machine learning in recognition of 3D object based on point cloud. (Chinese. English summary) [Zbl 07404519]
Period. Ocean Univ. China 51, No. 6, 125-130, 98 (2021)

Summary: With the continuous development of machine learning algorithm, and its good adaptability, accuracy and robustness, it has been widely used in the field of 3D object recognition, and has become a research hotspot of current point cloud processing. Firstly, the development and application of point cloud data recognition for 3D objects and machine learning are summarized. Then, it is analyzed and summarized from the three aspects of feature selection, feature extraction and object recognition. Finally, the paper points out the challenges and further research directions of machine learning in the field of point cloud processing based on 3D object recognition.

MSC:
68T05 Learning and adaptive systems in artificial intelligence
68T10 Pattern recognition, speech recognition

Keywords:
machine learning; 3D object recognition; point cloud; feature selection; feature extraction

Full Text: DOI