



3D OBJECT REPRESENTATION WITH TOPO-GEOMETRIC SHAPE MODELS (WedAmOR11)

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✳ Abstract :

We propose a new method for 3D object representation using weighted skeletal graphs. The geometry of an object is captured by assigning weights to the skeletal graph of the object, which in turn represents its topology. The weights provide necessary information for object reconstruction. The method is rotation, translation, and scaling invariant. Applications include shape representation, compression, and object recognition.