

## **STUDY ON USING GEOMETRIC HASHING IN ANSA FOR SHAPE RECOGNITION AND DATA MANAGEMENT**

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ABSTRACT –

Geometric hashing is a technique to create an index of geometry based on geometrical properties. This paper explores the application of geometric hashing in ANSA Shape recognition is one of the biggest advantage of this technique. Aims to create a list based on unique geometric attributes. When a new part is created, it will be checked with already created list to check for reusability.

This method can be used in Data management. Current ANSA DM is using Module id and revision to create the index of parts. Module id is created from the part name which was given by cad tool. In this study I create a method based on geometric hashing to use in ANSA DM tool. Main advantage with this new method is we can match parts even though part names are different.

ANSA Python API is used in creating all this methods. ANSA API is very flexible in customising ANSA to experiment new methods