Title:	Shape Signature using Algebraic Topology
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Abstract:	Algebraic topology is an area of pure mathematics, with its roots in the work of Poincare´. Now-a-days computer scientists are studying it with a view towards its applications to computer vision and image processing. In this thesis we have tried to understand the concepts of simplicial homology and persistent homology, and tried to use these concepts to address the problem of making a shape signature of different spaces. We hope this will stimulate the interest of beginners in both fields – computer vision and algebraic topology. For simplicial homology theory we have followed the book[Deo03] by Satya Deo, and the review paper[FC09] by Daniel Freedman and Chao Chen for persistent homology and shape signature.
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