

# REASONING AND VISUAL INFERENCE IN SHAPE UNDERSTANDING SYSTEM

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## **Abstract**

In this paper the visual inference that is part of the shape understanding method is proposed. In this new approach the Visual Reasoning Expert is able to perform visual inference by combining the rules in which the visual concept is embedded. The Visual Reasoning Expert that is part of the shape understanding system (SUS) performs reasoning based on the shape category called a visual concept. At first the visual object (shape) is transformed into symbolic representation (symbolic names) and next the results is transformed to one of the visual concepts. The system of shape understanding that is the implementation of the shape understanding method consists of different types of experts that perform different processing and reasoning tasks.

*Keywords:* shape understanding, a visual reasoning expert, a visual inference