Abstract

A natural scene image contains object categories which form ambiguous boundaries. Measuring this ambiguity while classifying an image, is a challenging task. A scene image belongs to multiple categories at a time which makes a task of classification multi-label one. Binary classification fails to capture this ambiguity while classifying the scene image into one of mutually exclusive classes. This problem can be handled by applying fuzzy logic with non-mutually exclusive class categories. This project work provides a ranking based on class membership instead of binary classification.

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**Index Terms**

Computer Science

Fuzzy Systems

**Keywords**

Fuzzy Logic  Binary Classification  Ranking