

# A Case Study on Scene Recognition Using an Ensemble Convolution Neural Network

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**Abstract**— this paper proposes architecture to recognize scene images based on an ensemble of two convolution neural networks. A convolution neural network is used to train massive scene images, and the other convolution neural network is used to extract objects from the scene images. The object lists are stored according to scene classes, and used as a clue to decide the top-1 and top-5 classes during scene image recognition stage.

**Keywords**— scene recognition; ensemble deep neural network; object detection; convolution neural network; deep learning



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