A Convolution Neural Network for Optical Character Recognition and Subsequent Machine Translation

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Abstract

Optical character recognition has been a longstanding challenging research topic in the broad area of machine learning and pattern recognition. In the present paper, we investigate the problem of textual image recognition and translation, which is among the most daunting challenges in image-based sequence recognition. A convolutional neural network (CNN) architecture, which integrates optical character recognition and natural language translation into a unified framework, is proposed. The accuracy of both OCR output and subsequent translation is moderate and satisfactory. The proposed system for OCR and subsequent translation is an effective, efficient and most promising one.

References


Index Terms

Computer Science
Artificial Intelligence

Keywords

Recurrent CNN; LSTM; CNN based LSTM; Performance Evaluation; Accuracy