

Content-Based Text Extraction from Image using Deep Learning

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Abstract: Text extraction proves beneficial in various scenarios, as it allows the conversion of information stored in non-text formats, like images or documents, into machine-readable and searchable text. In contemporary times, this technique serves as a time-efficient tool across different sectors such as real estate, finance, law, food ordering and delivery, and e-commerce. Industries are increasingly adopting text extraction methods. Previously, numerous models centered around text extraction utilized OCR, CNN, and RNN. When it comes to extracting text from images using content-based approaches, CNNs play a crucial role in recognizing and locating text regions within the images. In situations where the identification and transcription of text from images are essential, RNNs prove valuable for content-based text extraction. While CNNs and RNNs independently yield accurate outcomes in content-driven text extraction from photos, the combined utilization of both methods surpasses the individual effectiveness of each. The proposed CRNN system stands out in various aspects compared to existing methodologies. It not only demonstrates heightened accuracy and efficiency but also exhibits superior performance overall. Our investigation's findings highlight that the CRNN methodology, when applied, outperforms previous approaches by recognizing text in images with a reduced latency and more precise recognition

Keywords: CRNN, CNN, RNN, Content-based, Text Extraction, Images.

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