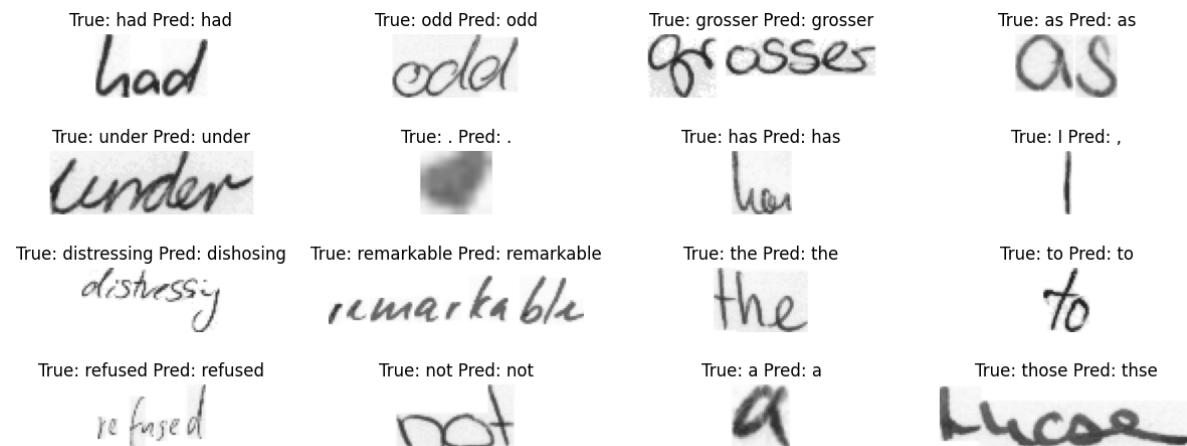# Revolutionizing Healthcare: Handwriting Detection and Recognition

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Scenario:

You work for a prominent healthcare company facing a significant challenge: healthcare professionals must invest valuable time transcribing handwritten information from physical medical documents into the digital system. The task is time-consuming and requires a lot of manual labor. As a Data Scientist for the company, you have been tasked with creating a handwriting detection and recognition model. The model should recognize handwritten text and output the words recognized. Your contributions could make a significant contribution and impact on the lives of healthcare professionals.

Deliverables:

- Create a convolutional neural network (CNN) based Tensorflow machine learning model.
- Make use of the IAM dataset to train the model, as it provides an extensive amount of diverse images.
- A detailed explanation of how the model works.
- Provide the accuracy rate of the model in recognizing handwritten words on the medical documents.
- The testing predictions you made while making the model.
- The validating predictions you made.
- Note any challenges or obstacles faced.
- Future work or next steps.