

An AI-Driven Framework for Digitized Audiological Reporting Based on Audiogram Analysis

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Abstract: In this emerging, difficult field, obtaining the best possible patient outcomes depends on the skillful interpretation and punctuation of audiological reports. The Audiogram Digitization Tool (ADT) is a novel method to improve the accessibility and ubiquitous hearing reports for reporting audiograms. For use in electronic health record systems, the ADT transforms conventional audiograms into a standard digital format. Using cutting-edge image processing techniques, it delivers the important hearing threshold data that are useful for data interpretation and correlation with clinical consequences. According to preliminary testing, the ADT can expedite diagnosis by preventing human mistake and reducing data entry time. Additionally, doctors can view data in photos and be informed of any changes in a patient's state, making it easier for experts to collaborate.

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