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Review on Doctor's Handwriting Recognition using Deep Learning

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Abstract: Specialists ordinarily compose in incomprehensible handwriting, making it troublesome for both the common public and a few drug specialists to get the drugs they have endorsed. It isn'tperfect for them to compose the prescription discreetly and deliberately since they will be dealing with handfuls of patients each day and will be swamped with work. As a result, their penmanship is illegible. This may result in reports or prescriptions consisting of brief shapes and cursive composing that a typical person or drug specialist won't be able to examine appropriately, which will cause endorsed drugs to be incorrectly spelled. However, some people usually to composing medicines in regional dialects since we all live in a range with a diversity of territorial dialects. It makes examining the content much more challenging. So, in this paper, we'll utilize a recognition framework to construct an apparatus that can interpret the handwriting of doctors into any dialect. This system will be made into an application that's completely independent and functioning. As the client transfers the medicine picture the program will pre-process the picture by performing image-processing, and word segmentations at first before processing the picture for preparation. CRNN which isutilized to train the model. We get the Yield within the shape of a pdf.

Keywords: Handwriting recognition, Machine learning, Image processing

REFERENCES

- [1]. S. Tabassum et al., "Recognition of Doctors' Cursive Handwritten Medical Words by using Bidirectional LSTM and SRP Data Augmentation," 2021 IEEE Technology & Engineering Management Conference Europe (TEMSCON-EUR), 2021, pp.
- [2]. E. Hassan, H. Tarek, M. Hazem, S. Bahnacy, L. Shaheen and W. H. Elashmwai, "Medical Prescription Recognition using Machine Learning," 2021 IEEE 11th Annual Computing and Communication Workshop and Conference (CCWC), 2021, pp. 0973-0979, doi: 10.1109/CCWC51732.2021.9376141.
- [3]. L. J. Fajardo et al., "Doctor's Cursive Handwriting Recognition System Using Deep Learning," 2020 IEEE 11th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment, and Management (HNICEM), 2020, pp. 1-6, doi: 10.1109/HNICEM48295.2020.9073521.
- [4]. K. Gaurav and Bhatia P. K., "Analytical Review of Preprocessing Techniques for Offline Handwritten Character Recognition", 2nd International Conference on Emerging Trends in Engineering & Management, ICETEM, 2019.
- [5]. Salvador España-Boquera, Maria J. C. B., Jorge G. M., and Francisco Z. M., "Improving Offline Handwritten Text Recognition with Hybrid HMM/ANN Models", IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 33, No. 4, April 2020.
- [6]. A. Brakensiek, J. Roland, A. Kosmala, and J. Rigoll, "Offline Handwriting Recognition using various Hybrid Modeling Techniques & Character N-Grams", Available at http://irs.ub.rug.nl/dbi/4357a84695495.

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- [7]. Reena Bajaj, Lipika Dey, and S. Chaudhury, "Devnagari numeral recognition by combining decision of multiple connectionist classifiers", Sadhana, Vol.27, part. 1, pp.-59-72, 2020.
- [8]. Sandhya Arora, "Combining Multiple Feature Extraction Techniques for Handwritten Devnagari Character Recognition", IEEE Region 10 Colloquium and the Third ICIIS, Kharagpur, INDIA, December 2021.

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