## IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 9, May 2023

## **Research on Doctor's Handwriting Recognition**

Apurva Bhuyar<sup>1</sup>, Rutuja Farkade<sup>2</sup>, Pragati Lanjewar<sup>3</sup>, Vedant Dighade<sup>4</sup>, Aastha Sawarkar<sup>5</sup>, Vaishnavi Datir<sup>6</sup>

Students, Department of Computer Science & Engineering<sup>2,3,4,5,6</sup> Professor, Department of Computer Science & Engineering<sup>1</sup> SIPNA College of Engineering & Technology, Amravati, Maharashtra, India Sant Gadge Baba Amravati University, Amravati, Maharashtra, India

**Abstract:** Specialists ordinarily type in unimaginable penmanship, making it troublesome for both the common people and a few drug specialists to get the medicines they have endorsed. It isn't perfect for them to type in the medicine discreetly and systematically since they will be managing handfuls of patients each day and will be overwhelmed with work. As a result, their penmanship is messy. This may result in reports or medicines comprising of brief shapes and cursive composing that an ordinary individual or drug specialist won't be able to read appropriately, which can cause endorsed medicines to be incorrectly spelled. Be that as it may, a few people are usually to composing medicines in territorial dialects since we all live in a range with a difference of territorial dialects. It makes dissecting the substance much more challenging. So, in this paper, we'll utilize an acknowledgment framework to construct a device that can decipher the penmanship of doctors in any language. This framework will be made into an application that's completely independent in working. As the client transfers the medicine picture the program will pre-process the picture by performing picture pre-processing, and word segmentations at first sometime recently handling the image for preparation. CRNN which is used to prepare the demonstration. We get within the Yield within the frame 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 <u>http://irs.ub.rug.nl/dbi/4357a84695495</u>.

[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.

Copyright to IJARSCT www.ijarsct.co.in DOI: 10.48175/IJARSCT-10399



533