

**ARE YOU TIRED OF  
MANUALLY TYPING  
URDU?**

**THEN WE HAVE THE  
PERFECT SOLUTION  
FOR YOU**

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# **URDU OCR**

**URDU HANDWRITING  
RECOGNITION**

# ABSTRACT

Optical character recognition aims to recognize text in images. Recent breakthroughs in deep learning have revolutionized OCR systems for languages such as English. In this project, we have developed OCR for Urdu handwriting. This would work not only for handwriting but also for printed Urdu.

## DATA SET

We have developed one of its kind data set for Urdu Handwriting. This data set covers the context of almost all Urdu. Our dataset has 15,164 lines and their corresponding ground truths.

## DEEP LEARNING ARCHITECTS

- 1- CNN-RNN-CTC
- 2- CNN-RNN-CTC + Language Model
- 3- Attention based encoder-decoder

## RESULTS

We have achieved 91.20% accuracy. The model will show same accuracy for almost every type of writer.

## FUTURE WORK

- 1- Expand dataset to include images of multilingual text
- 2- Combine outputs of different models
- 3- Create a webservice and mobile application

## SPECIAL THANKS

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