Artificial Intelligence and Data Science

Semester: 6

Course Name: Mini project (ADD334)

Topic : CNN model enhancement and user experience improvements to Marks2CSV

Abstract :

This mini project aims at exploring the further possibilities of the project Marks2CSV done by our senior batch under the mentorship of Dr. Deepa V during the academic year 2022-2023. The project mentioned, is a tool to assist teachers in the data entry process that streamlines the extraction of table marks from various images and enhances data accuracy and reduce manual effort; Thereby, providing a reliable and efficient solution for data entry, optimize productivity, and facilitate administrative task. It was made possible using OCR with the support of CNN and it delivered significant results to educational institutions to swiftly access and analyse marks data, driving informed decision-making and timely interventions when necessary.

The further possibility of the project involves the improvements to:

1. **The CNN Model:**

   To recognise double digit marks, detect and avoid redundancies in the identified characters, to recognise fractional marks on the paper and improve the robustness of the model by training with more real life handwritten data.

2. **User Experience:**

   The project needs a more user friendly experience which can be done by using a frontend mobile application. Furthermore the time and effort needed for the entire process needs to be drastically reduced. Other improvements include introducing a fixed hardware system similar to a scanner which can instantly capture the data and provide the results.

Through this mini project, we aim to achieve this possibilities thereby improvising the working of Marks2CSV.

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