Hiring Assignment

ASSIGNMENT SUBMISSION FORM: LINK

Objective

Reducing Latency of Pytesseract OCR Model using Multi-threading on Linux (only Linux system)

The objective of this assignment is to significantly reduce the inference latency of the pytesseract OCR model while maintaining or improving its performance for OCR tasks. The current model takes approximately 9 seconds to process a high-resolution pdf page , which is unsuitable for real-time or high-throughput applications. The goal is to optimize the model to achieve an inference time of at least 0.5 seconds or lower per page without compromising the accuracy and quality of the OCR output.

Please note that the evaluation metric is primarily focused on inference time while maintaining fair qualitative accuracy. Feel free to reach out if you have any concerns. We have also attached a PDF as sample data.

Note- You need to use Yolov8 models for layout segmentation first and then, apply ocr on only the text blocks. No need to process tables, graphs, images, etc.

**Let us know if you have any questions or even if you want to brainstorm: (WA: +1 9173352139)