DESIGN OF OPTICAL CHARACTER RECOGNITION SYSTEM

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ABSTRACT

The "Design of Optical Character Recognition (OCR) system" is capable of recognizing various types of fonts, languages and document formats, including handwritten text. Using an iterative and flexible spiral methodology, this research focuses on data collection through interviews and questionnaires, qualitative and quantitative data analysis, and the use of advanced analytical tools. The research results show that the developed OCR system achieves accuracy above 90% and is able to detect text in real-time with YOLOV8 integration, showing high responsiveness suitable for mobile applications. This system is expected to increase efficiency and accessibility in various sectors by reducing dependence on physical documents and improving user experience.

Keywords: Optical Character Recognition(OCR), YOLOV8, Handwritten, Text Recognition, Real Time Detection