

BATCH-13

Title of the Project : DOCWISE AI-A Smart Medical History Analyzer
And Doctor Recommendation System.

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ABSTRACT

The DOCWISE AI system is a prototype tool that provides medical recommendations by analyzing clinical documents to find suitable specialists for patients. It combines text extraction, disease mapping, and doctor recommendations into a single workflow. The system has four main modules: (1) a PDF Analyzer that uses PyMuPDF and Tesseract OCR, (2) a Summarization and Keyword Detection Module that employs transformer models, (3) a Disease-to-Specialist Mapper based on a curated lookup table, and (4) a Doctor Filtering and Ranking Engine that uses a local dataset of 1,000 doctor profiles. This system is developed entirely in Python with libraries like pandas, spaCy, transformers, and KivyMD. It maps 56 diseases to 22 types of specialists across 15 medical fields. While its current version relies on heuristic keyword detection and exact string matching, it effectively showcases a modular and data-driven approach to document-based medical triage. The project lays a scalable foundation for future efforts in medical entity recognition, fuzzy mapping, and AI-driven diagnostic support.