Figure 1: System Architecture

LAYER 1: USER INTERFACE (FRONTEND)

File: `app.py`
Role: Application Controller.
Function: Orchestrates routing based on user input.
Input: Receives user interactions (PDF uploads, Mode selection).
Output: Renders global footer.

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LAYER 2: ACTIVE PROCESSING LOGIC (MODULES)

Files: `screener.py` , `extractor.py`
Role: Core logic modules for research screening and data extraction.
Function: Executes PDF processing, PICO evaluation, and LLM interaction.

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LAYER 3: CORE ENGINE (SHARED SERVICES)

File: `utils.py`
System Files: Includes `parser.py` (Structural) and `confidence.py` (Reliability).
Role: Provides all backend logic and helper functions.
Function: Provides PDF extraction, LLM Provider Architecture, Data formatting, and system logging.