



Detailed Component Breakdown:

- 1. File Upload & Validation:
 - Accepts PDF/DOCX files
 - Validates file types
 - Creates temporary storage
- 2. Text Extraction:
 - PDF: PyPDF2 extraction

- DOCX: python-docx extraction
 - Handles empty text cases
3. Resume Parsing (EnhancedResumeParserAgent):
 - Uses RAG pipeline with FAISS vectorstore
 - LLM (GPT-3.5) for structured extraction
 - Extracts: name, contact, skills, experience, education, etc.
 4. Job Description Matching (EnhancedJobMatchingAgent):
 - Sentence Transformers for embedding similarity
 - LLM for detailed matching analysis
 - Calculates initial match percentage
 5. Scoring (EnhancedScoringAgent):
 - Weighted scoring (skills 40%, experience 35%, education 15%, projects 10%)
 - Experience duration parsing
 - Education level evaluation
 - Project relevance scoring
 6. Gap Analysis (EnhancedGapAnalysisAgent):
 - Identifies critical missing skills
 - Highlights experience gaps
 - Provides improvement recommendations
 7. Blacklist & Filtering (BlacklistAgent):
 - Degree requirements check
 - Keyword blacklisting
 - Location restrictions
 - Experience threshold
 - Duplicate detection
 8. MongoDB Storage:
 - Stores approved candidates with scores
 - Tracks rejected candidates with reasons
 - Uses batch IDs for grouping
 9. API Response:
 - Returns ranked approved candidates
 - Provides rejection reasons
 - Includes statistics (approval rate, etc.)
 - Returns batch ID for reference