Software Requirements Specification (SRS)

1.1 Introduction

This document defines the functional and non-functional requirements for the AI Resume Screener system. The goal is to automate resume screening using semantic similarity techniques and present results in a chatbot-style interface.

1.2 Scope

The system allows users to upload a job description and multiple resumes. It extracts text, computes semantic similarity using NLP models, and ranks candidates based on relevance.

1.3 Intended Audience

Product managers, developers, QA engineers, and HR stakeholders.

1.4 Definitions and Acronyms

- JD: Job Description
- OCR: Optical Character Recognition UI: User Interface
- API: Application Programming Interface
- ATS: Applicant Tracking System

2. Overall Description

- Product Perspective: Web-based application with modular backend and dynamic frontend.
- Product Functions: Upload, extract, embed, rank, display.
- User Characteristics: HR professionals with basic tech literacy.
- Constraints: No ATS integration in MVP.
- Assumptions: Users upload readable files; backend has access to required libraries.

3. Functional Requirements

- Upload JD and resumes
- Extract text using PyMuPDF, python-docx, and OCR Encode documents using Sentence Transformers
- Compute cosine similarity
- Return ranked results via chatbot UI

4. Non-Functional Requirements

- Scalability: Handle 100+ resumes
- Performance: Response time < 5 seconds

- Compatibility: Modern browsers
- Security: File sanitization and safe API calls