SYNOPSIS

ON

AIJobSync

IN PARTIAL FULFILLMENT OF

MASTER OF COMPUTER APPLICATION

BY

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1. INTRODUCTION:

In today's competitive job market, online job portals are crucial for bridging the gap between job seekers and recruiters. Platforms like LinkedIn, Indeed, and Naukri.com offer basic functionalities for job searching and recruitment. However, they often fall short of providing personalized solutions, advanced applicant screening, and intelligent matching powered by AI. Enter **AIJobSync**, a revolutionary job portal that combines the power of **Artificial Intelligence, Deep Learning, React, MongoDB, and Spring Boot** to create a smarter and more efficient recruitment experience.

AIJobSync isn't just a platform for connecting employers with candidates—it redefines how job hunting and recruitment work. It offers **AI-powered tools** to enhance the hiring process and applicant experience by providing features like AI interviews, resume optimization, and intelligent job matching. The system is built to cater to both job seekers and recruiters, making the process seamless, accurate, and time-saving.

AIJobSync is designed to address the inefficiencies and gaps in traditional job portals by leveraging modern technologies to create a smarter, faster, and more intuitive platform. Unlike conventional platforms, which often rely on generic filters and manual processes, AIJobSync incorporates **Artificial Intelligence and Deep Learning** to streamline the hiring journey. From helping job seekers craft resumes and assess their suitability for roles to enabling recruiters to find the perfect candidates with precision, AIJobSync is a one-stop solution for all recruitment needs. Its focus on **intelligent automation, real-time insights, and user-friendly features** ensures that both applicants and recruiters save time, reduce effort, and make informed decisions, revolutionizing the way hiring happens in today’s digital age.

2.EXISTING SYSTEM AND NEED FOR SYSTEM:

1.1 Existing System: The current job portals in the market, such as LinkedIn, Naukri.com, and Indeed, rely on traditional approaches for connecting job seekers and recruiters. These systems offer basic features like job postings, candidate searches, and application tracking, but they fall short in providing intelligent automation and personalization. Key limitations of the existing systems include:

- Generic Matching
- Manual Screeming
- Limited Accessibility
- Lack of Interactivity

1.2 Need For System:

The recruitment landscape demands a smarter, more efficient approach to overcome the limitations of traditional job portals. Manual resume screening, time-consuming interviews, and generic job recommendations hinder the hiring process, making it less effective for both recruiters and applicants. There is a growing need for a platform that leverages **Artificial Intelligence and Deep Learning** to automate and enhance these processes. A system like **AIJobSync** addresses these challenges by offering intelligent resume scoring, personalized job recommendations, virtual AI interviews, and advanced candidate matching tools. It improves decision-making for recruiters, provides applicants with actionable feedback, and ensures accessibility and interactivity, ultimately revolutionizing the hiring process with speed, precision, and engagement.

3 SCOPE AND OBJECTIVE OF SYSTEM:

3.1 Scope of Project:

The primary scope of **AIJobSync** is to revolutionize the recruitment and job-hunting process by leveraging advanced technologies such as **Artificial Intelligence, Deep Learning, React, MongoDB, and Spring Boot**. The system aims to bridge the gap between recruiters and job seekers by providing an efficient, interactive, and intelligent platform for job management. Its scope extends to streamlining job applications, enabling intelligent resume analysis, and automating preliminary candidate evaluations through AI interviews, ensuring a seamless experience for users.

3.2 Objectives of project:

- To streamline the recruitment process by automating resume screening, scoring, and candidate evaluation using Artificial Intelligence.
- To provide job seekers with personalized job recommendations based on their experience, skills, location, and career preferences.
- To enhance applicant preparation by offering tools for resume creation, AI-driven scoring, and virtual interview simulations.
- To simplify the hiring process for recruiters by enabling efficient candidate search, matching, and management.
- To reduce time-to-hire and optimize recruitment decisions through intelligent matching and real-time insights.
- To Improve Accessibility and Usability.
- To Minimize Manual Input Errors

4 List of Modules/Functionalities:

4.1 Profile Management Module:

4.1.1 Admin: In profile module admin

- Can Registration
- Can Login
- Can View Profile
- Can Modify Profile
- Can Manage Users
- Can logout

4.1.2 Applicant: In profile module Applicant

- Can Registration
- Can Login
- Can View Profile
- Can logout

4.1.2 Recruiter: In profile module Recruiter

- Can Registration
- Can Login
- Can View Profile
- Can logout

4.2 Resume:

4.2.1 Applicant: In Resume Module Applicant

- Can Check Resume Score
- Can Create Resume
- Can Edit Resume
- Can Download Resume

4.3 AI-Interview :

4.3.1Applicant : In AI-Interview module Applicant

- Can Schedule his interview
- Can take feedback from AI

4.4 Find-Job :

4.3.1Applicant : In Find Job module Applicant

- Can Sorting job
- Can View All Jobs
- Can Saved Job
- Can View Company Page
- Can Apply Job

4.5 Talent-Match :

4.3.1 Recruiter : In Find Talent-Match Module Recruiter

- Can Find Applicant
- Can View Applicant Profile
- Can Message to Applicant
- Can View Company Page

4.6 Post Job :

4.3.1 Recruiter : In Post Job Module Recruiter

- Can Save as Draft a Job
- Can Publish the Job

4.7 Posted Job :

4.3.1 Recruiter : In Posted Job Module Recruiter

- Can View all Posted Job
- Can view Applied Applicants
- Can Schedule Next Round
- Can Accept/Reject Schedule Time
- Can Edit the Job
- Can Delete the Job

4.8 Job-History:

4.3.1 Applicant : In Job History Module Applicant

- Can View all Applied Jobs
- Can view Saved Jobs
- Can View Offred Jobs
- Can Accept/Reject Offered Job
- Can View the Interviewing Jobs

5. System requirements specification (SRS) (Operating Environment Software and Hardware):

5.1 Server-side requirement:

1. Hardware Requirements

- Processor: Intel Core i3 and above
- RAM: 8GB
- HDD: 512GB

2. Software Requirements

- Operating System : Windows 7 or higher
- Database : MongoDB
- Front End : React-js
- Server-Side Script : Spring-Boot
- Software Development Tool : Visual Studio code
- Model-Train: Python, Tenser flow, Deep Learning

5.2 Client-side requirements

1. Hardware requirements

- Processor : Intel core i3
- RAM : 4GB
- HDD : 512GB

2. Software Requirements

- Operating System : Windows 10
- Browser : Google Chrome

6.PROPOSED SYSTEM:

The proposed system, **AIJobSync**, is an intelligent job portal designed to overcome the challenges of traditional recruitment systems by leveraging **Artificial Intelligence, Deep Learning, and modern web technologies**. It provides a comprehensive platform for both job seekers and recruiters, enhancing efficiency, personalization, and interactivity throughout the hiring process.

The system will feature **AI-powered resume analysis and scoring**, helping applicants tailor their resumes to match job descriptions and improve their chances of selection. **AI-driven interviews** will provide virtual assessments, reducing the need for preliminary live interactions. Personalized job recommendations will be generated based on the applicant's experience, skills, location, and salary preferences.

For recruiters, the platform will include advanced candidate-matching tools to find the most suitable talent for job openings. Recruiters will also have access to modules for **job posting**, **managing applicants**, and tracking job statuses with features to invite, accept, or reject applicants efficiently.

7. FEASIBILITY STUDY:

7.1 Technical Feasibility: The development of **AIJobSync** is technically feasible due to the availability of modern tools, frameworks, and technologies. The backend will leverage **Spring Boot** for scalability and performance, while **React** will power the dynamic and responsive front-end interface. **MongoDB** will provide a robust, NoSQL database for handling complex data structures efficiently. The use of **Artificial Intelligence and Deep Learning** models for resume scoring, job matching, and AI interviews is supported by established libraries and frameworks like TensorFlow and PyTorch. Furthermore, the integration of APIs such as Google Maps, LinkedIn, and Twilio ensures seamless functionality. The technical infrastructure, including cloud services like AWS or Azure, supports scalability and ensures the platform can handle high user traffic and data volumes effectively

7.2 Economics Feasibility:

The development of **AIJobSync** is economically feasible due to its reliance on free and open-source tools and technologies. Frameworks like **React** for the front-end, **Spring Boot** for the back-end, and **MongoDB** for the database eliminate the need for costly proprietary software. The use of free-tier cloud services, such as **AWS Free Tier** or **Google Cloud Free Tier**, enables hosting and deployment at minimal costs during the initial stages.

7.3 Operational Feasibility:

The operational feasibility of **AIJobSync** lies in its user-friendly design and ability to address real-world challenges faced by job seekers and recruiters. The platform provides intuitive modules for resume creation, job application, and candidate management, ensuring minimal training is required for users to adopt the system. Automation of repetitive tasks, like candidate shortlisting and interview scheduling, simplifies the recruitment process, enabling users to focus on decision-making and strategic tasks. With robust support for APIs and cloud integration, the system is operationally reliable and scalable to meet the growing demands of a dynamic recruitment market. The user-centric approach ensures smooth implementation and high user satisfaction.