

STREAMLIT INTERFACE – HireSense App

Overall Flow:

- The entire system is built using Streamlit
- Uses spaCy to preprocess text: lowercasing, stopword removal, and lemmatization
- Uses SentenceTransformer to convert text into semantic embeddings
- Uses cosine similarity to find the best matches between resume and job description embeddings
- Role switching and user flow is managed using `st.session_state.role`

Initial Screen – Role Selection:

This is the landing page of the HireSense application

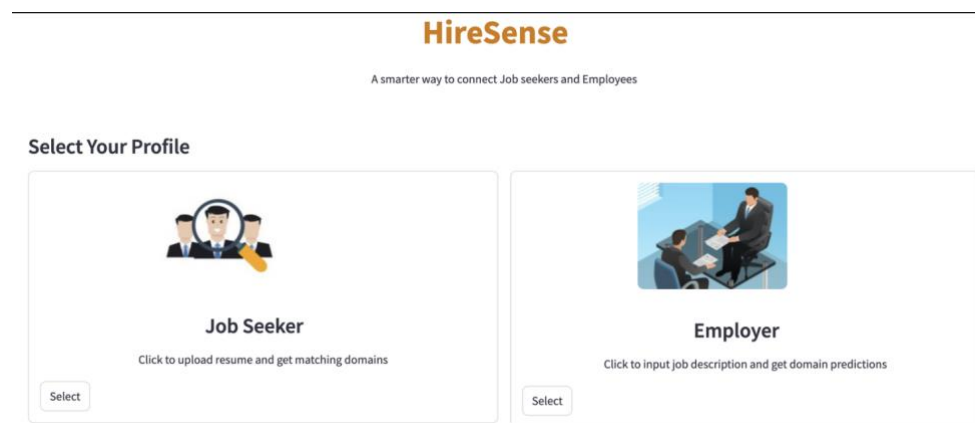
The user is prompted to choose their role:

- Job Seeker – upload resume to get matched job domains
- Employer – paste job description to find relevant resumes

Two visually distinct cards are displayed with illustrations and instructions

When the user clicks the “Select” button:

- Their choice is stored using `st.session_state.role`
- This controls what screen appears next



Job Seeker Portal:

- This screen appears if the user selected the Job Seeker role.
- The user can:
 - Upload a resume in .pdf, .docx, or .txt format, or
 - Paste resume text manually in a text area.

When the user clicks ‘Find Matching Jobs’:

1. The resume text is cleaned and lemmatized using spaCy
2. It is embedded into vector form using SentenceTransformer
3. The app loads job data from `jobs.csv` and `jobs_embeddings.npy`
4. Cosine similarity is calculated between the resume and job descriptions
5. The top 5 job matches are shown with:
 - Job title
 - Job ID
 - Similarity score

[← Change Role](#)

Job Seeker Portal

Upload Resume (PDF/DOCX/TXT)

Drag and drop file here
Limit 200MB per file • PDF, DOCX, TXT

Browse files

Or paste resume text:

Professional Summary
 Enthusiastic Software Engineer with 3+ years of experience building scalable web applications and microservices. Proficient in full-stack development with a focus on backend performance, API design, and system architecture. Passionate about writing clean, efficient code and delivering value to end users.

Technical Skills
 Languages: Python, JavaScript, Java, SQL
 Frameworks: Django, Flask, React, Node.js

Find Matching Jobs

Top Job Matches

Match 1 | Score: 0.71

API Support Engineer

ID: 3884435854

Employer Portal:

This screen appears if the user selected the Employer role.

The employer can paste a job description into a text box.

On clicking 'Find Matching Resumes':

1. The job description is cleaned and embedded (similar to the Job Seeker flow).
2. The app loads candidate resumes (resumes.csv) and their embeddings (resumes_embeddings.npy).
3. Computes cosine similarity between the job description and all resumes.
4. Displays the Top 5 matching resumes, showing:
 - Resume ID
 - Resume snippet
 - Similarity Score

Employer Portal

Post a Job Description

Paste the job description here:

About the job
 Seeking Founding Data Scientists and Machine Learning Engineers

Drill India, AI | 6 rue Emancipation 92000 Nanterre (France)

Find Matching Resumes

Top Resume Matches

Resume ID: 38863868

Snippet: CONSULTANT Summary College graduate with interest in insurance claims work. Proven record of success in all endeavors. Strong work ethic and focus on the details. Excited to begin career in investigative work. Searching for an entry level position as an insurance claims adjuster. ...

Similarity Score: 0.6618

Resume ID: 24038629

Snippet: INFORMATION TECHNOLOGY DIRECTOR Experience Information Technology Director April 1999 to January 2015 Company Name ~ City , State For the past sixteen years I was a leader of change for the largest law firm in the Central Pennsylvania area with ov...

Similarity Score: 0.6433