

AI Multi-Agent Assistant



Built with: LangChain, CrewAI, LangGraph, LangFuse, Gradio, Groq, OpenAI

"Three agents, one powerful assistant."

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Project Overview

1 Optimize Web SEO

The SEO Agent improves webpage SEO and RankMath-style blog optimization.

2 Apply for Jobs

The Job Applier Agent finds jobs, tailors CVs, and writes cover letters.

3 Humanize & Clean AI-Generated Content

The Content Humanizer Agent improves AI text, removing plagiarism.

Agents Breakdown

SEO Agent

Improves webpage SEO & RankMath-style blog optimization

Job Applier Agent

Finds jobs, tailors CVs, and writes cover letters

Content Humanizer

Humanizes AI text + removes plagiarism

Technologies Used



LLMs

OpenAI GPT + Groq (Fallback)



Tools

Custom + CrewAI Tools (Scrape, File Read/Write)



Tracking

LangFuse (Observability & Evaluation)



Orchestration

LangChain + CrewAI + LangGraph



UI

Gradio with interactive blocks







Storage

Qdrant (Embeddings) not done



Architecture

1.  Multi-Agent Flow with LangGraph & Conditional Routing
2.  ToolNode executes tools like seo_recommendation_interface
3.  Human-in-the-loop enabled via Gradio
4.  Fallback LLM logic using OpenAI → Groq

Agent Demos

1

SEO Optimizer

- User enters URL or blog- Gets specific SEO fixes- Optional: Blog optimized for RankMath

2

Job Applier

- Upload CV + Job Description or Search Job- ATS-friendly CV + tailored cover letter

3

Content Humanizer

- Paste or upload text- Output: Humanized, AI-safe, and plagiarism-free

Results + Integrations

AI/Plagiarism Scoring

via Winston AI

Auto-downloads

of results (CVs, letters, rewrites)

LangFuse Logging

logs all LLM outputs

Realtime Interaction

via Gradio



Advanced Features

Job Search

via RapidAPI

Agent Security

with QualiFire (planned)

Extensible Structure

for new tools

LangGraph Workflows

conditional logic

What's Next?

1

LangGraph Memory & Async

Add agent memory and asynchronous execution paths

2

User Authentication

Add user accounts for personalized experiences

3

Backend Deployment

Deploy via FastAPI or Replit to make the system accessible

4

Vector Search

Add vector search for job and SEO content reuse



Thank You!

Made with  by Ismaeel SagharAsk me anything! 

