ResumeSync – Version 1 Review Document

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Date: October 2025

1. Project Overview

ResumeSync is an AI-powered résumé–job matching tool that helps job seekers evaluate how well their résumés align with job postings.

Version 1 delivers a **fully functional command-line prototype** with the following features:

- Job search and scraping from **LinkedIn** via *JobSpy*
- Resume upload and PDF text extraction via *PyPDF2*
- AI-based résumé–JD comparison using *OpenAI API*
- Output of strengths, weaknesses, missing skills, and an optional match score

2. Implemented Components

- **Core CLI workflow:** job → select → upload → analyze → result (implemented)
- **JobSpy integration:** fetches 5 LinkedIn postings per query (implemented)
- **OpenAI analysis:** compares resume text and JD keywords (implemented)
- **PDF parser:** extracts text (cleaned automatically)
- **Error handling & prompt tuning:** partially done
- **Streamlit GUI:** Will be implemented on V2

3. Demonstration Summary

Current CLI flow

1. User enters a role (e.g., “UX Designer”) + location (“United States”).
2. Top 5 LinkedIn jobs appear with titles + companies.
3. User picks a job number to view details.
4. System fetches full JD and offers to upload a resume (PDF path).
5. CLI shows results such as:

4. Issues & Solutions

Issue	Resolution / Plan
JobSpy not scraping Indeed/Glassdoor/ZipRecruiter (login-restricted)	Aborted – LinkedIn only
Private or login-gated LinkedIn URLs	Handled by filtering for public URLs only
OpenAI API cost + error handling	Added basic retry logic and prompt simplification
Resume preview in CLI too cluttered	Removed preview; auto-parses in background
GUI delay (Streamlit)	Deferred to Version 2 milestone

5. Outstanding Work & Help Needed

- **Prompt tuning** for more balanced skill matching
- **Improved output formatting** for human-readable summaries
- **Error logging & rate-limit handling** for OpenAI calls

6.Milestones for Version 2 (Next 3–4 Weeks)

Milestone	Description
M1 – Streamlit UI Prototype	Build drag-and-drop interface (simple form + text area)
M2 – Enhanced OpenAI Prompt	Add contextual scoring and clearer skill categorization
M3 – Export PDF Reports	Enable “Download Analysis as PDF”
M4 – History & Session Memory	Store last 5 analyses locally for quick comparison
M5 – Testing & Documentation	Write final README, usage guide, and demo video

7. Self-Reflection

- **Progress Satisfaction:** 8 / 10 – Core pipeline works end-to-end.
- **Feasibility:** Project can be finished within 4 weeks with focused GUI work.
- **Easier than expected:** JobSpy integration and CLI structure.
- **Harder than expected:** Handling private URLs. (Indeed, Glassdoor, Zip recruiter)
- **Light-bulb moment:** Realizing that a simple CLI MVP with clean AI logic is more impactful than a half-working GUI.

8. Summary

Version 1 successfully delivers a usable CLI prototype for resume job analysis using AI.

It lays the foundation for Version 2, which will transform the CLI logic into a Streamlit interface with visual dashboards and exportable results.