Personal CV Chatbot

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1. Purpose

Provide an interactive way for visitors to explore my professional background, skills, and work experience by chatting with my CV. Instead of reading through a static résumé, users can ask questions about my projects, roles, and achievements.

2. Technologies

- Django: Handles the backend for chat orchestration, document uploads, and chunking logic.
- pgvector (PostgreSQL): Stores and retrieves vector-embedded text chunks for relevant CV sections.
- OpenAl Completion Model: Processes prompts (combined with retrieved chunks) to deliver fact-grounded answers.
- Render: Hosts the Django application to showcase a lightweight, self-contained deployment.

3. Key Features

- o **Document Upload & iFrame Preview**: CV documents can be added in the backend, then displayed in an iframe on the front end.
- o **Chunking & Vector Search**: Uploaded documents are split into smaller pieces and indexed via pgvector for efficient similarity-based retrieval.
- Question-Answer Flow: Users ask about my work history, projects, or other topics; the system retrieves the most relevant chunks and uses the completion model to generate concise, context-aware responses.
- Ease of Deployment: Demonstrates how quickly a self-contained RAG (Retrieval-Augmented Generation) system can be implemented and deployed using minimal infrastructure.

4. Impact

- Interactive Résumé Experience: Enhances user engagement by offering a conversational interface rather than a static PDF or webpage.
- Highlighting Technical Proficiency: Showcases hands-on experience with Django, PostgreSQL (pgvector), and the OpenAI ecosystem.
- o **Scalability & Simplicity**: Illustrates that even a small-scale, personal project can adopt advanced search and retrieval techniques with minimal overhead.

Conclusion

By combining Django, pgvector for PostgreSQL, and an OpenAl Completion Model, this personal CV Chatbot transforms a traditional résumé into an engaging, interactive experience. The straightforward setup emphasizes how easily a self-hosted retrieval-augmented chatbot can be built and maintained.

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