Jatin Mayekar

AI Prompt Engineer

Professional Experience

AI Web Application Developer*GitHub: [link](https://github.com/jatinmayekar/my-app/blob/master/backend/server.py)*

- Developed Flask-based web application with GPT-3.5 Turbo, enhancing user experience through real-time interactions.

- Incorporated text-to-speech for dynamic audio responses.

- Managed sessions securely using Flask-Session.

- Integrated Google's OAuth2.0 for authentication and Gmail API; established real-time email notifications via Google Cloud Pub/Sub.

- Implemented robust logging mechanisms and integrated CORS for cross-origin requests.

Web Application Developer - Nerd AI Chat Interface*github: [link](https://github.com/jatinmayekar/my-app/blob/master/src/App.js)*

- Crafted an interactive chat interface using Geist UI components.

- Enabled real-time AI backend communication using Axios.

- Provided multimodal responses (text and audio) for enhanced user engagement.

- Developed audio recording, ensuring versatility in user input.

- Designed a responsive UI with robust error handling for API calls.

Automated Document Processing & Knowledge Retrieval*github: [link](https://github.com/jatinmayekar/ai_project_1/blob/main/TextQuery2PDFs.ipynb)*

- Designed a tool for automated data extraction from PDFs using Google Colab.

- Integrated GPT for advanced text processing and refinement.

- Deployed text partitioning and embedding techniques for precise information retrieval.

- Addressed challenges in PDF data extraction, querying large texts, and refining answers using AI.

- Utilized libraries like PyPDF2, tiktoken, and OpenAI for a comprehensive solution.

TextualPrompt3D: Point Cloud and Mesh Generator*github: [link](https://github.com/jatinmayekar/ai_project_1/blob/main/point_e_colab.ipynb)*

- Developed an interface to convert textual prompts into 3D models.

- Addressed the challenge of converting abstract textual prompts into detailed 3D point clouds.

- Integrated point cloud generation methods using OpenAI's models.

- Implemented an interactive UI using ipywidgets for an enhanced user experience.

- Designed to handle diverse textual prompts and convert point clouds to meshes in PLY format.

DocuQuery: Advanced Conversational Document Retrieval System*github: [link](https://github.com/jatinmayekar/TechPDFchatbot/blob/main/main.py)*

- Extracted and processed information from complex PDF documents.

- Introduced an advanced search mechanism using OpenAI embeddings.

- Developed a conversational interface for intuitive document queries.

PDF Highlighter: Automated Content-Type Annotation System*github: [link](https://github.com/jatinmayekar/annotateUnstructuredioPDFs)*

- Automated the visual highlighting of different PDF elements.

- Assisted in the digital transformation of hard copy documents.

- Improved document accessibility with visual content-type distinctions.

Key Achievements

- Developed multiple AI-driven applications addressing real-world challenges in document processing, 3D modeling, and user interaction.

- Demonstrated expertise in integrating OpenAI models, designing user-friendly interfaces, and ensuring data security and accessibility.

- Pioneered in automating processes, enhancing user experiences, and innovating solutions in the AI domain.

Technical Skills

- Programming: Python, JavaScript

- Frameworks: Flask, Geist UI

- Tools: Google Colab, OpenAI, Google Cloud Pub/Sub, ipywidgets

- Databases: Google Drive API

- Other: OAuth2.0, Gmail API, CORS, Axios