

“Building a Novel Question-Answering system using Retrieval-Augmented Generation for the Fair Political Practices Commission”

By Saanvi Dua

Abstract:

The California Fair Political Practices Commission (FPPC) receives a high volume of inquiries via email from public officials, the general public, and other agencies, which currently requires staff to manually search through informational documents and manuals to provide timely responses. This process is both labor- and time-intensive.

To address this challenge, we design a question-answering (QA) system that drafts responses to emailed questions by retrieving relevant information from the FPPC’s manuals using a retrieval-augmented generation (RAG) framework. Although the current implementation focuses on a single manual, the system is designed to be adaptable to the broader set of FPPC documents. By converting the FPPC’s publicly available PDF manuals into markdown files, we parse and segment text into sections, retrieve documentation relevant to a query, and utilize a large language model (OpenAI’s ChatGPT) to generate responses grounded in the retrieved text.

We validate our approach through manual review of retrieval accuracy and generated answers, as well as through a survey on Prolific, where participants compare responses from our system against those generated by directly querying ChatGPT with the FPPC manual. Results from this evaluation are pending survey completion, but the study is designed to assess differences in accuracy and usability between our system and baseline methods.

Date: Tuesday, September 2nd, 2025

Time: 1:00 PM – 3:00 PM

Location: <https://calpoly.zoom.us/my/foaad>

Committee: Dr. Khosmood, Dr. Kurfess, Dr. Jones