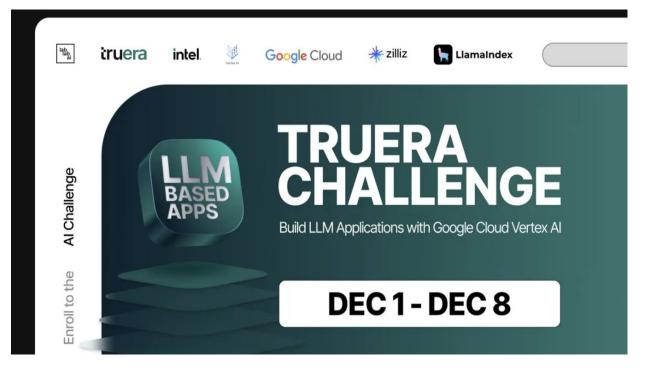


# **Meet Priya**

A reimagined US Immigration personal assistant

#### You May Remember Us From Earlier



#### **Ask Priya**

🧂 🛥

Ask Priya is a reimagined US Immigration personal assistant. It outperforms Ask Emma (current chatb... AskPriya

**OpenAl TruLens LlamaIndex** 

#### **Meet The Team**







Systems Engineer @DMC Inc

#### **Bassim Eledath**

ML Engineer @Square



Phuc Nguyen Applied Research DS @Linkedin

#### **The Problem & Target Audience**

<u>Annually</u> there are:

- 22.1 million international arrivals

- **1.08 million** international students

- 483,927 total registration for the H1B visa

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Annually there are:

- 22.1 million international arrivals
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<u>But</u>:

- Not everyone speaks English
- Significant wait times for response
- Personalized assistance like lawyers is **expensive**

#### Emma vs Priya





X Formulaic chat, with users picking from a menu of choices. Answers are imprecise and unhelpful Need Help? Ask Priya



✓ Much more of a 'dialogue ' experience, with precise/accurate answers

#### Emma vs Priya

can I travel outside the US with an expired f1 visa?



I'm still researching this subject and don't have any further information right now. Check back at a later date for more information.

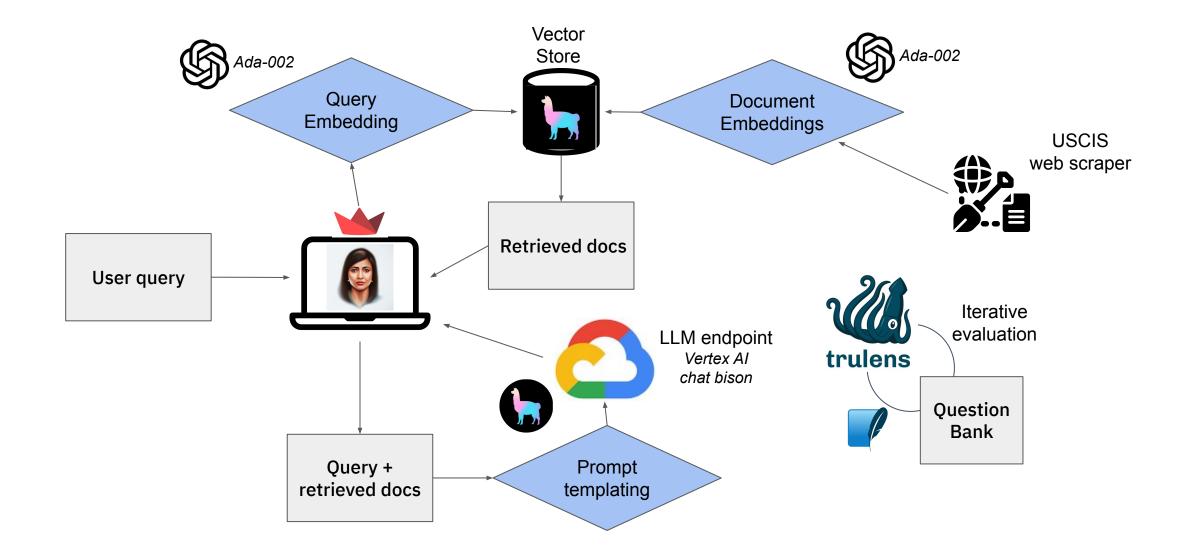
Click here to Provide Feedback

#### **Demo Time**

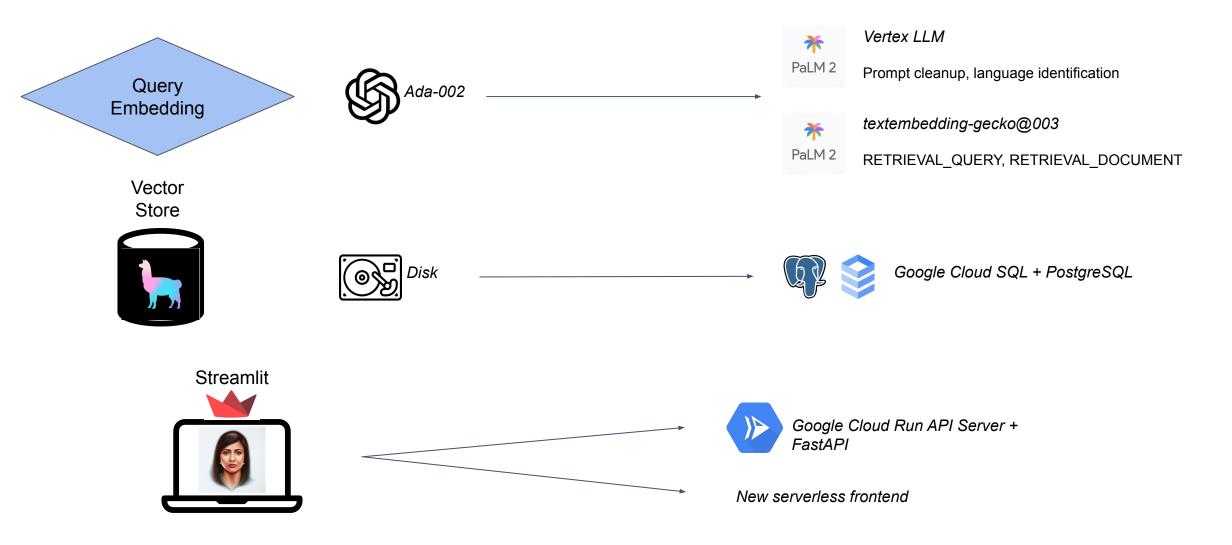
💬 Ask Priya î About SCIS News	💬 Ask Priya
Disclaimer View on GitHub	<ul> <li>What is USCIS?</li> <li>How do I check my case status?</li> <li>What is a Green Card?</li> </ul>
	What would you like to ask about?

#### https://askpriya2.streamlit.app/

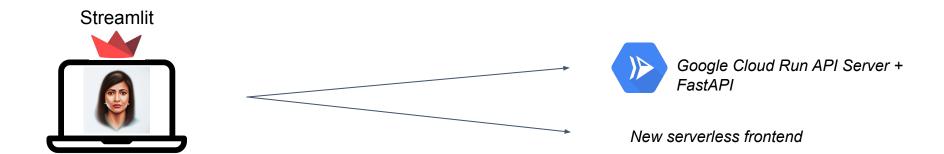
### **V1 Systems Design**



## **V2 Systems Design Improvements**



### **V2 Systems Design - More Improvements!**



We've containerized a FastAPI package which we can deploy to Google Cloud Run.

This means that the backend and frontend both run lighter and the backend can scale to meet demand.

Our frontend can now be serverless!

## **Other Post hackathon improvements**



#### **Improved Performance**



Two reasons for improvement:

Query rewriting
 Auto-merging retrieval

## **Query Rewriting - Why?**

# Retrieval can be very prompt sensitive!

What are the requirements for changing status from J1 visa to H1B visa?

You ma

.

You may not change your nonimmigrant status from J-1 to H-1B visa.

Sources: Change My Nonimmigrant Status Category, Conrad 30 Waiver Program

😚 Can I change from J1 to H1B visa?

Yes, it is possible to change from a J-1 visa to an H-1B visa. However, the process for changing from one visa status to another can be complex and requires proper filing of the necessary forms and meeting the eligibility criteria for the H-1B visa. It is recommended to consult with an immigration attorney or the United States Citizenship and Immigration Services (USCIS) for specific guidance and requirements for changing from a J-1 visa to an H-1B visa.

Sources: <u>H-1B Specialty Occupations and Fashion Models</u>, <u>Options for Nonimmigrant</u> <u>Workers Following Termination of Employment</u>

#### **Query Rewriting - The Solution**

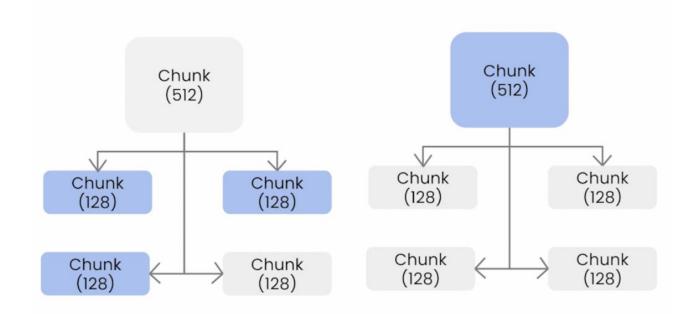
"""Rewrite the following query to improve grammar, clarify terms, and add context for US immigration-related questions.

Format visa types properly (e.g., 'f1' to 'F-1 visa'), and specify if countries mentioned are outside the US for clear geographic context.

Maintain the original question's intent and ensure it is concise and clear for effective document retrieval:"""

#### **Auto-merging Retrieval**

# Information on the USCIS website is hierarchical!



#### 3 Things we are actively working on

Introduce feedback events into the app

Start using ground truth evaluations

Moving to a next.js frontend



## **Thank You!**