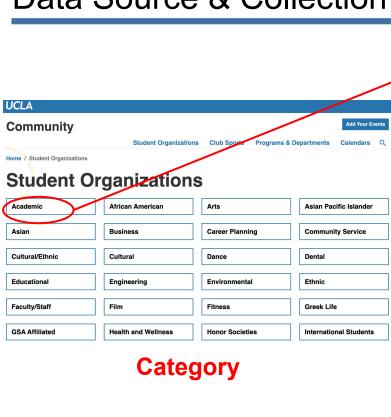
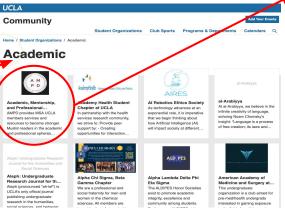
UCLA Club Recommender

STAT 418 – Proposal Presentation Hengyuan (David) Liu

Data Source & Collection









Full Descriptions

Club Names

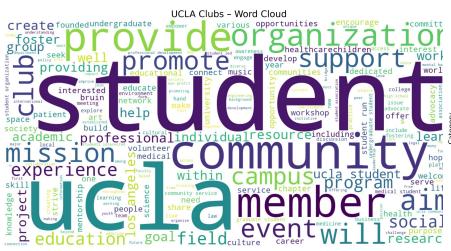
Site	https://community.ucla.edu/studentorgs	
Technique	Python requests + BeautifulSoup (no API, pure HTML)	
Features	Category, Name, Description, Detail_url	
Storage	$CSV \rightarrow JSON$ for model	



Department of Statistics and Data Science

Exploratory Insights

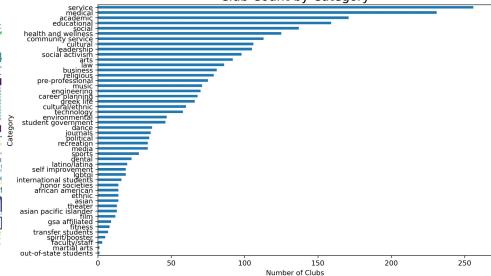
# Categories	48
# Club	2,829
# Unique Club	1,439



Top 5 Category by Count of Clubs

Category	Count of Clubs	Percentage
service	256	9.05%
medical	231	8.17%
academic	171	6.04%
educational	159	5.62%
social	137	4.84%

Club Count by Category





Proposed Product & Architecture

- Goal: Recommend top 5 UCLA clubs based on user interest input.
- So far: Using the TF-IDF and K-NN (Cosine) create a model by descriptions. Using Flask Shiny app

Next Step

- Explore LLM + RAG to build a real chatbot
- Add filters (by category, similarity, keyword)
- Flask API hosted on AWS EC2/Google Cloud
- Shiny app hosted via shinyapps.io
- Dockerized for reproducibility
- Code + docs on GitHub

