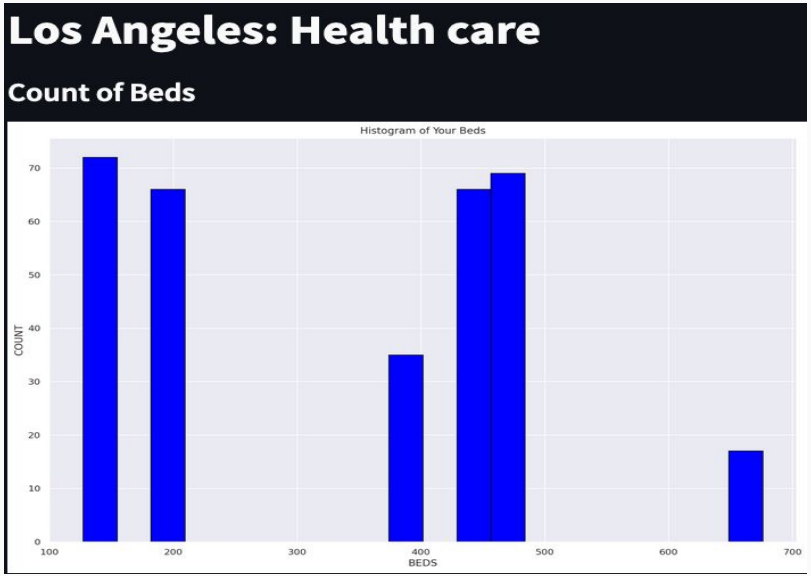
Omdena - LA Local Chapter

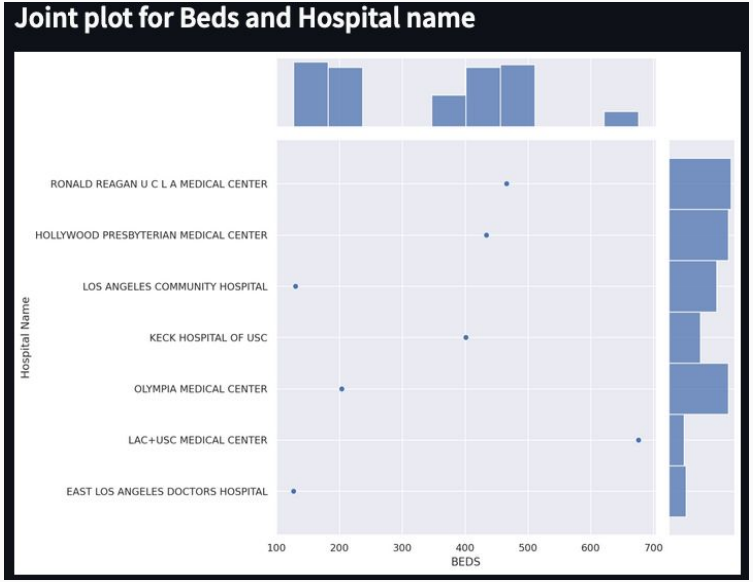
Health Care dataset analysis - Rudro, R

Streamlit EDA App



Plot of Beds and LA Hospitals

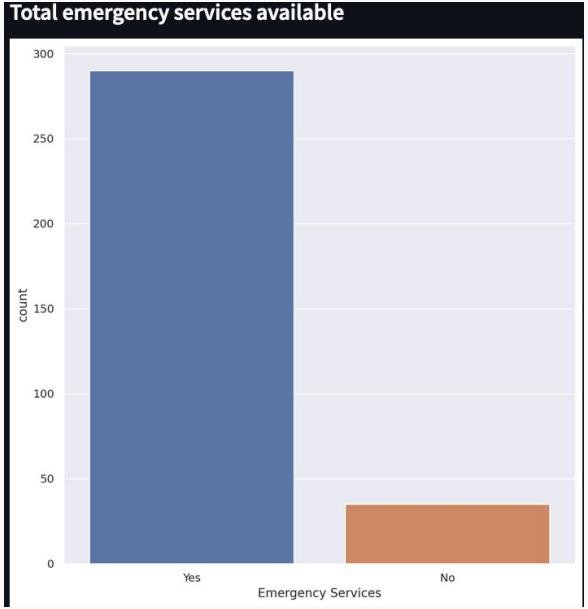
- LAC + USC Medical centers have close to 700 beds
- East Los Angeles doctors hospital and Los Angeles community hospital have the least number of beds



Available emergency services

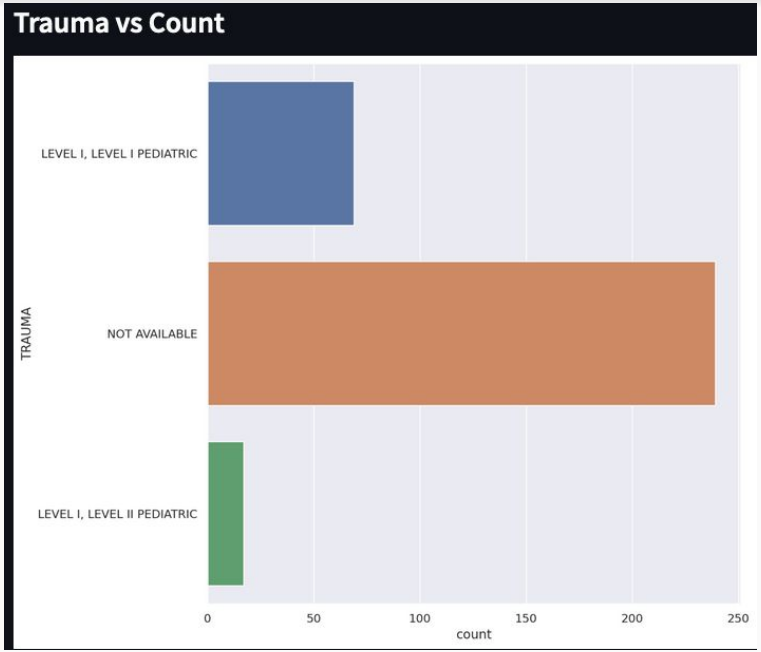
Almost 300 hospitals have emergency services

Only about 30 facilities don’t have emergency services



Trauma unit count

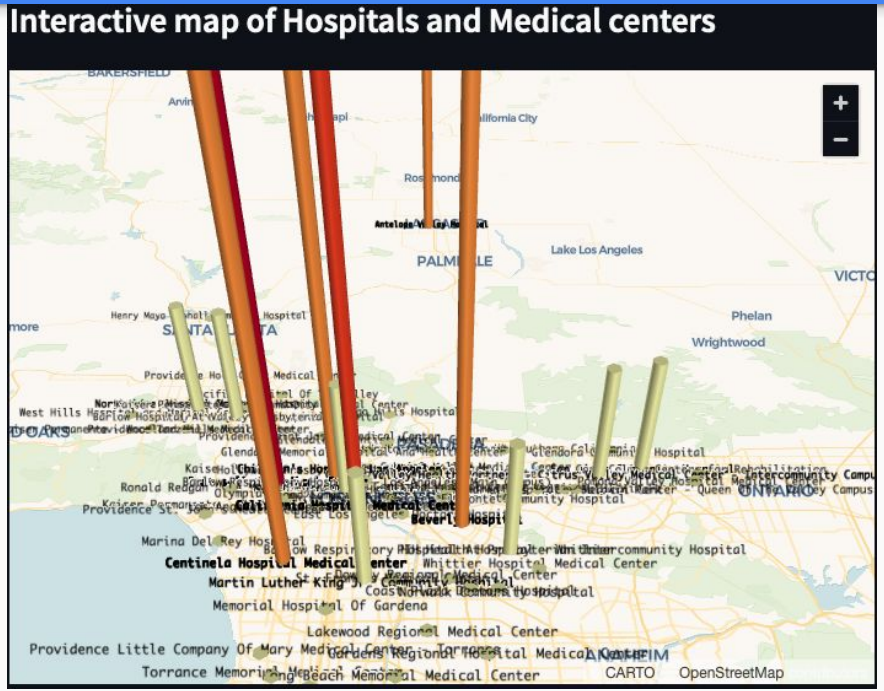
Close to 250 facilities don’t have trauma unit - the state can work to increase more trauma units



Average charges based on provider name with location

Provider Name	LATITUDE	LONGITUDE	Average Covered Charges
OLYMPIA MEDICAL CENTER	34.0573	-118.3605	102,538.6741
KECK HOSPITAL OF USC	34.062	-118.2013	99,331.3406
RONALD REAGAN UCLA MEDICAL CENTER	34.0666	-118.4466	78,459.9793
HOLLYWOOD PRESBYTERIAN MEDICAL CENTER	34.0965	-118.2905	63,191.7071
LAC+USC MEDICAL CENTER	34.0596	-118.2084	50,866.7194
EAST LOS ANGELES DOCTORS HOSPITAL	34.0236	-118.1842	41,233.5053
LOS ANGELES COMMUNITY HOSPITAL	34.0193	-118.1865	38,275.3113

Map of hospital and medical centers



Big picture of a new Data science project

What if I am in need of medical needs in the middle of street X somewhere in LA ?

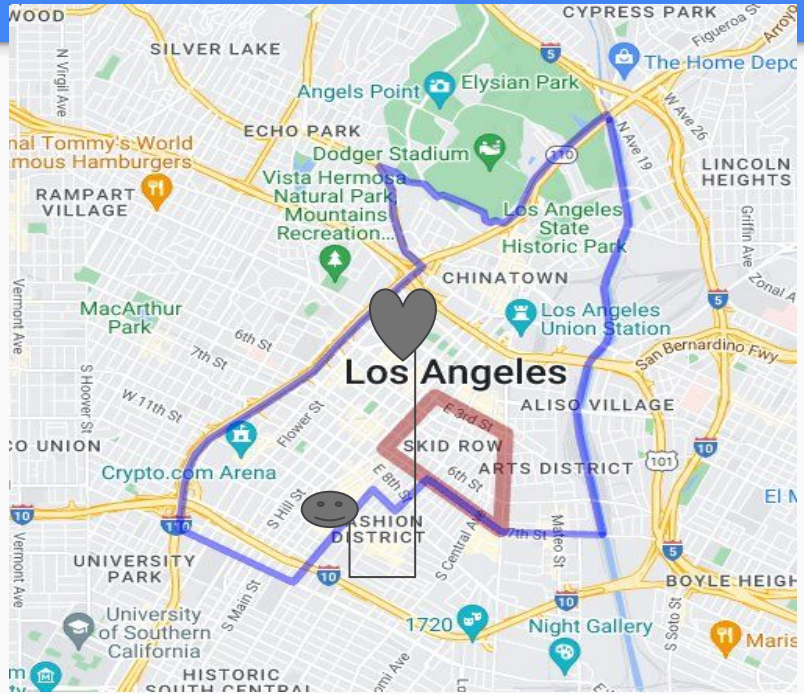
I don’t know the best option for me depending on the insurance I own, my problem, my location, affordability and much more

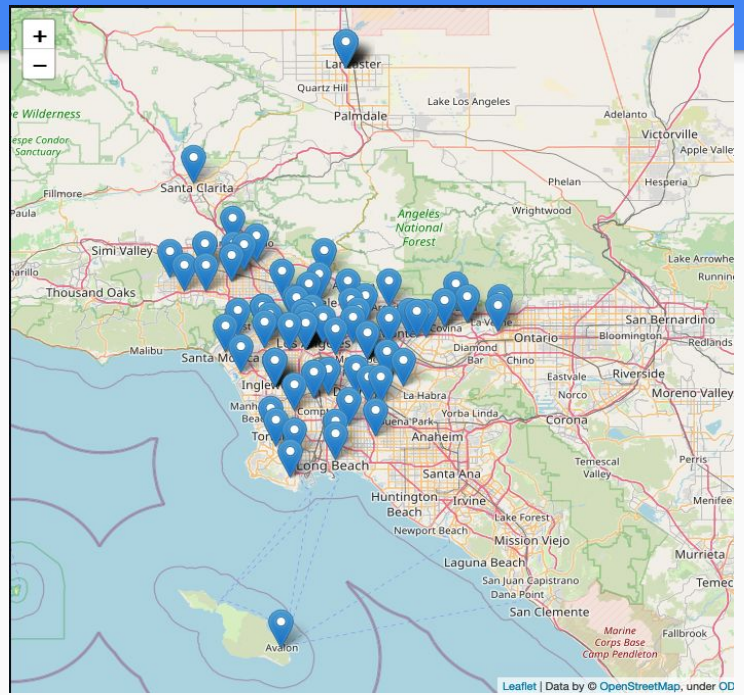
Development of a ML model

What if we make a ML model that can take a lot of parameters which we discussed earlier?

The model can then suggest few names of facilities to me where I can rush to for medical assistance.

My position and a best healthcare for me based on the model





Conclusion

- This is just a overview
- We need to collect more datasets related to health insurance, doctor’s appointment, nurses available and much more
- Extensive pre-processing of the data is required
- Healthcare analyst which deep understanding of the domain is very important for this project
- We can finally make a model that can be integrated into a mobile app or web-app which can be later spread on the market for testing