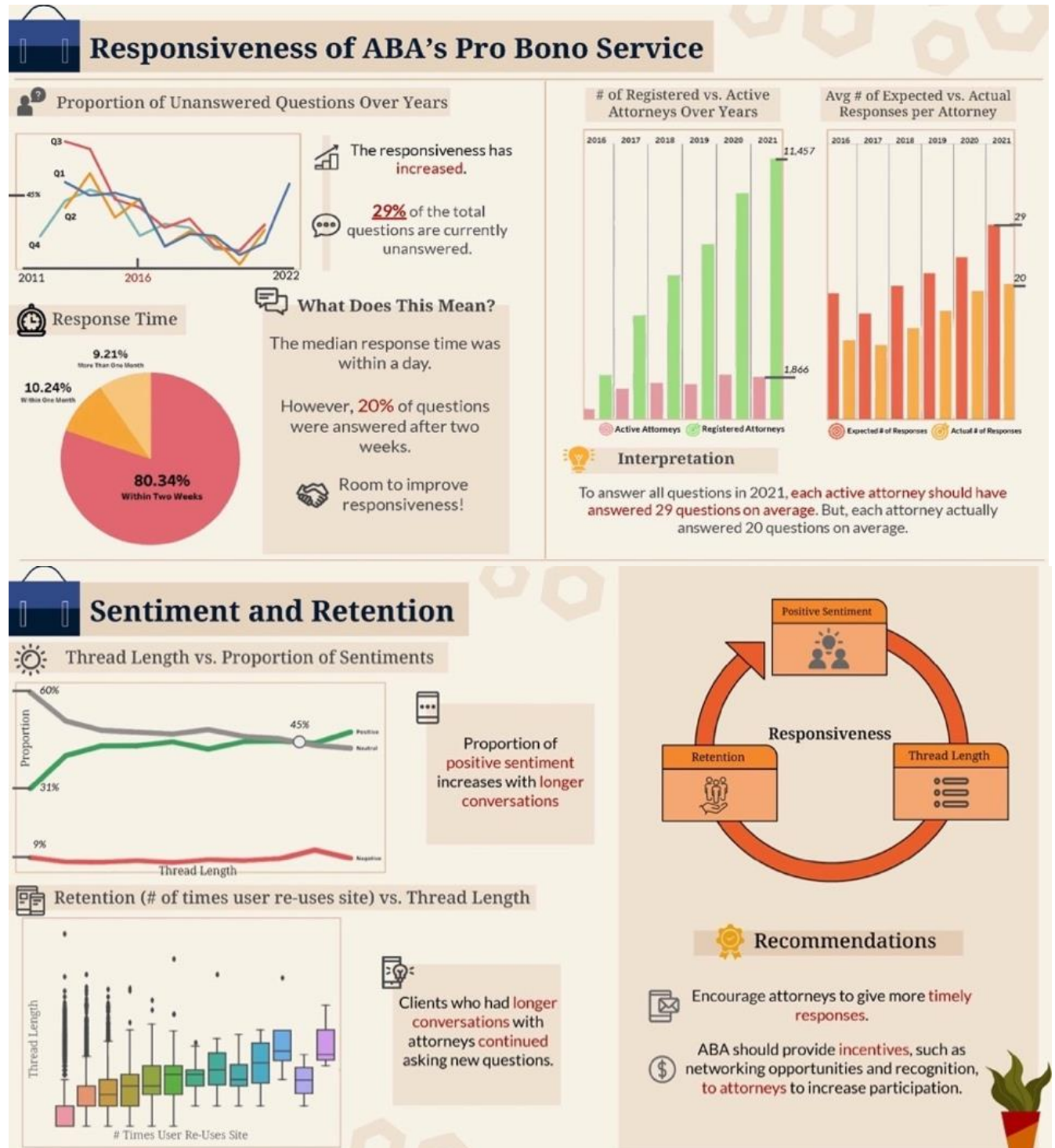


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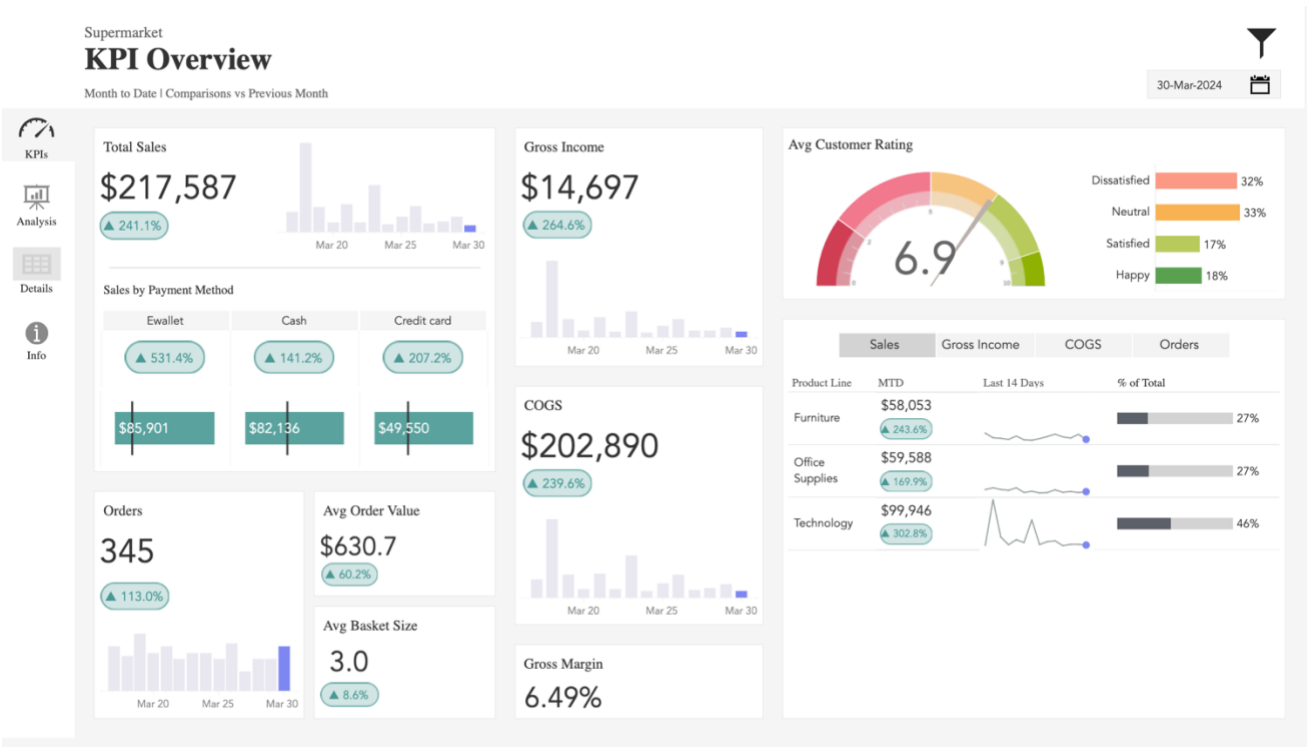
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UCLA DataFest Hackathon Submission Winner



At a 2-day Data Analytics Hackathon with 400 undergrads, my team won the Judges' Choice Award for humanizing data. Our project focused on analyzing attorney responsiveness and client retention rates within the American Bar Association's (ABA) Pro Bono Service, which offers free legal counseling. Utilizing state-of-the-art BERT, we conducted sentiment analysis and discovered a correlation between clients' positive sentiments, longer conversations, and higher retention rates.

Tableau Shopify Dashboard



Power BI stories based on NYC real estate and tax claims

Home Price Disparity in NYC

NYC Housing

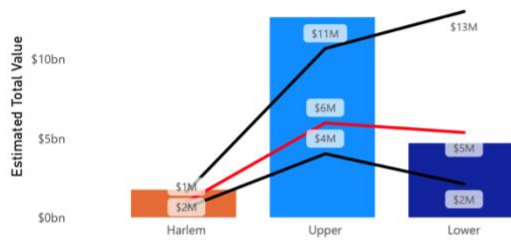
\$21,505,551,898
Estimated Total Value

4,722
Total # of Properties

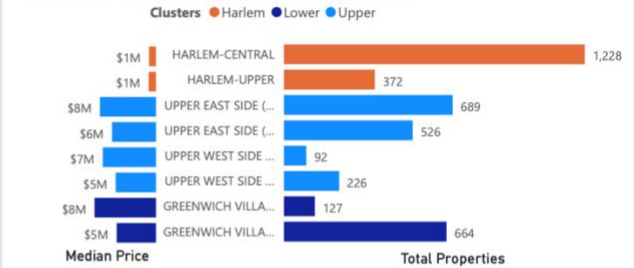
\$3,800,000
Median Sale Price

4.73%
Average Sale Turnover

Estimated Total Value and Price Range per Cluster



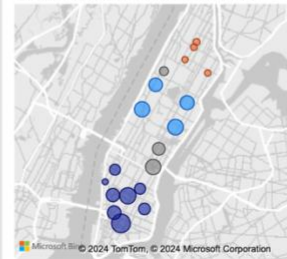
Median Price and Total Properties per Neighborhood



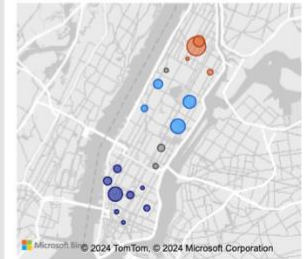
Total Properties and Median Price per Cluster



Neighborhoods by Median Price



Neighborhoods by # of Properties



How NYC EITC claims have changed since 2004

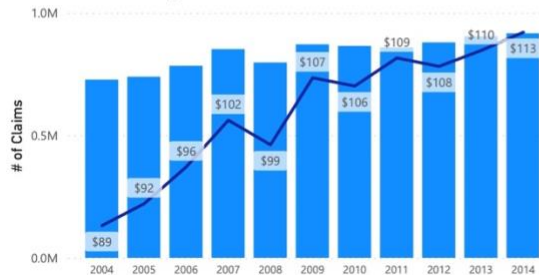
NYC EITC

\$951,336,090
Total Amount Claimed

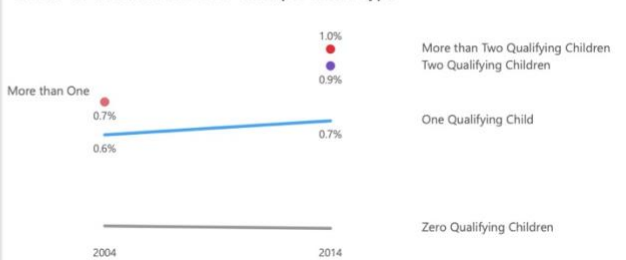
9,199,688
Total # of Claims

\$103
Average Credit

Claim Volume and Avg. Credit over Time



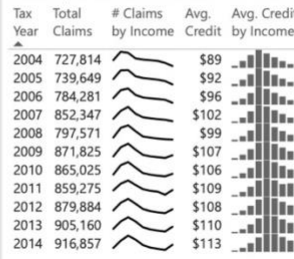
Credit-to-Income Ratio over Time, per Claim Type



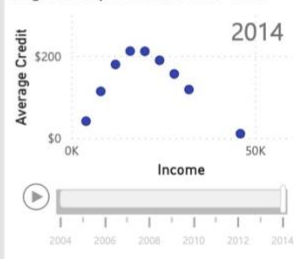
Claim Volume and Avg. Credit per Income Bracket



Claims per Income Bracket over Time



Avg. Credit per Income over Time

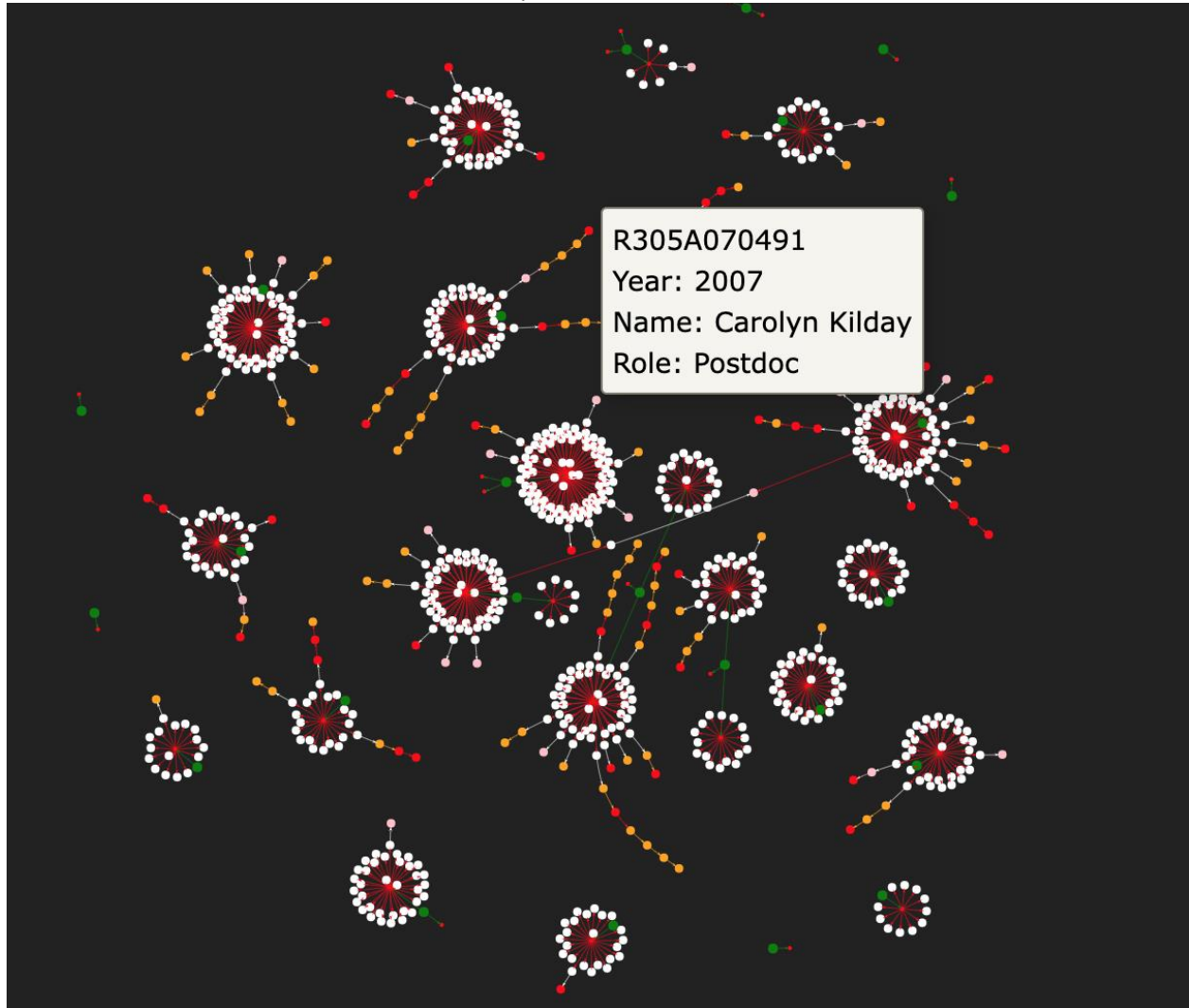


Network Analysis of Individual Careers and Training Grants

Task

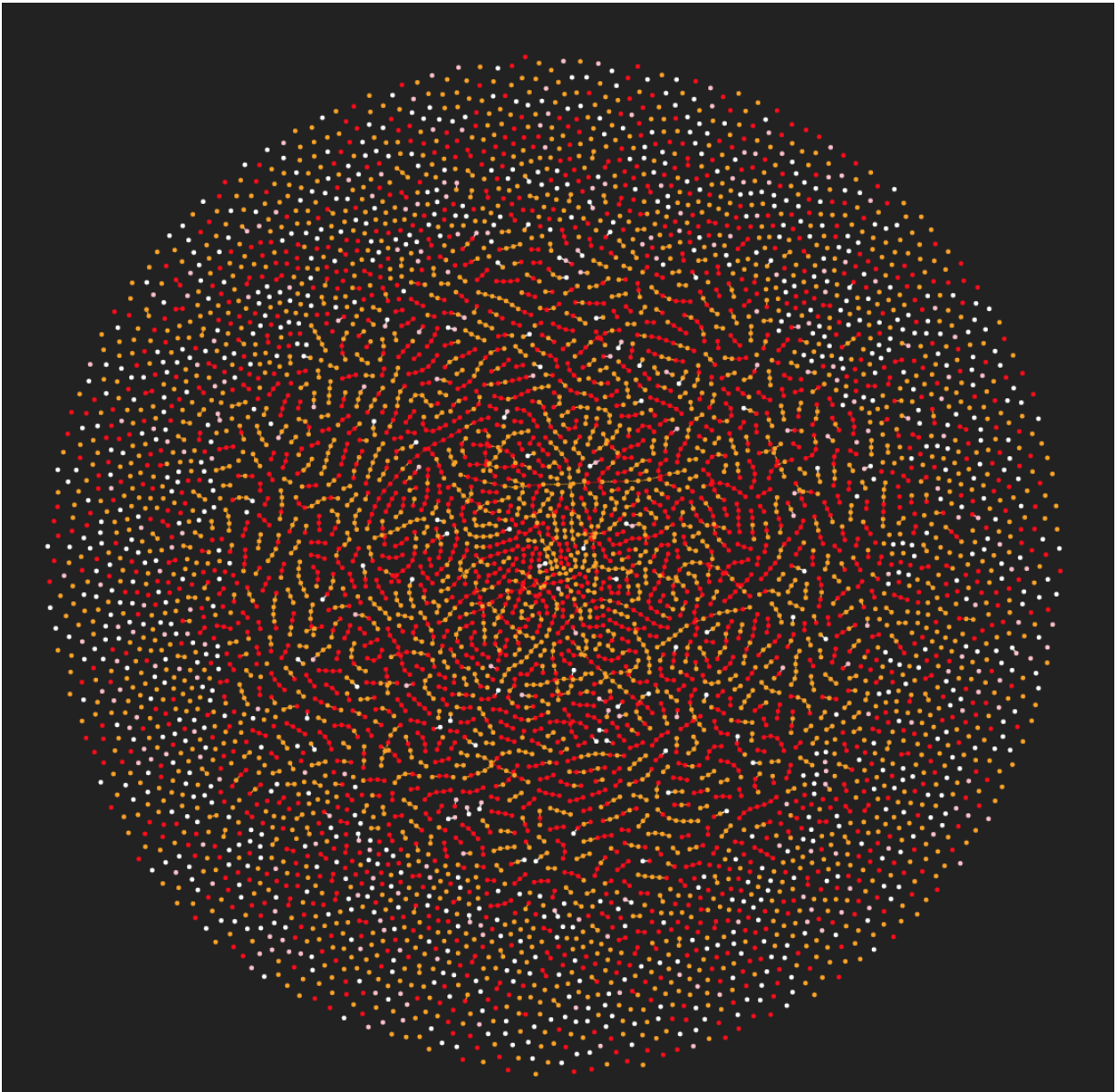
“In terms of the network analysis, I wonder if there is a way to scrape/pull data from our abstracts to tell a story about how IES has built a community of scholars in the education sciences...I'd love to be able to know all the instances of pre- and post-doctoral fellows who have continued to participate in IES projects as key personnel, co-PIs, or PIs and to understand the sequencing and timing of those fellows and which programs they were initially trained in.”

predocs.html



*predoc network where each white ring is a training grant's predocs

nodes.html



*all individual timelines visualized per line

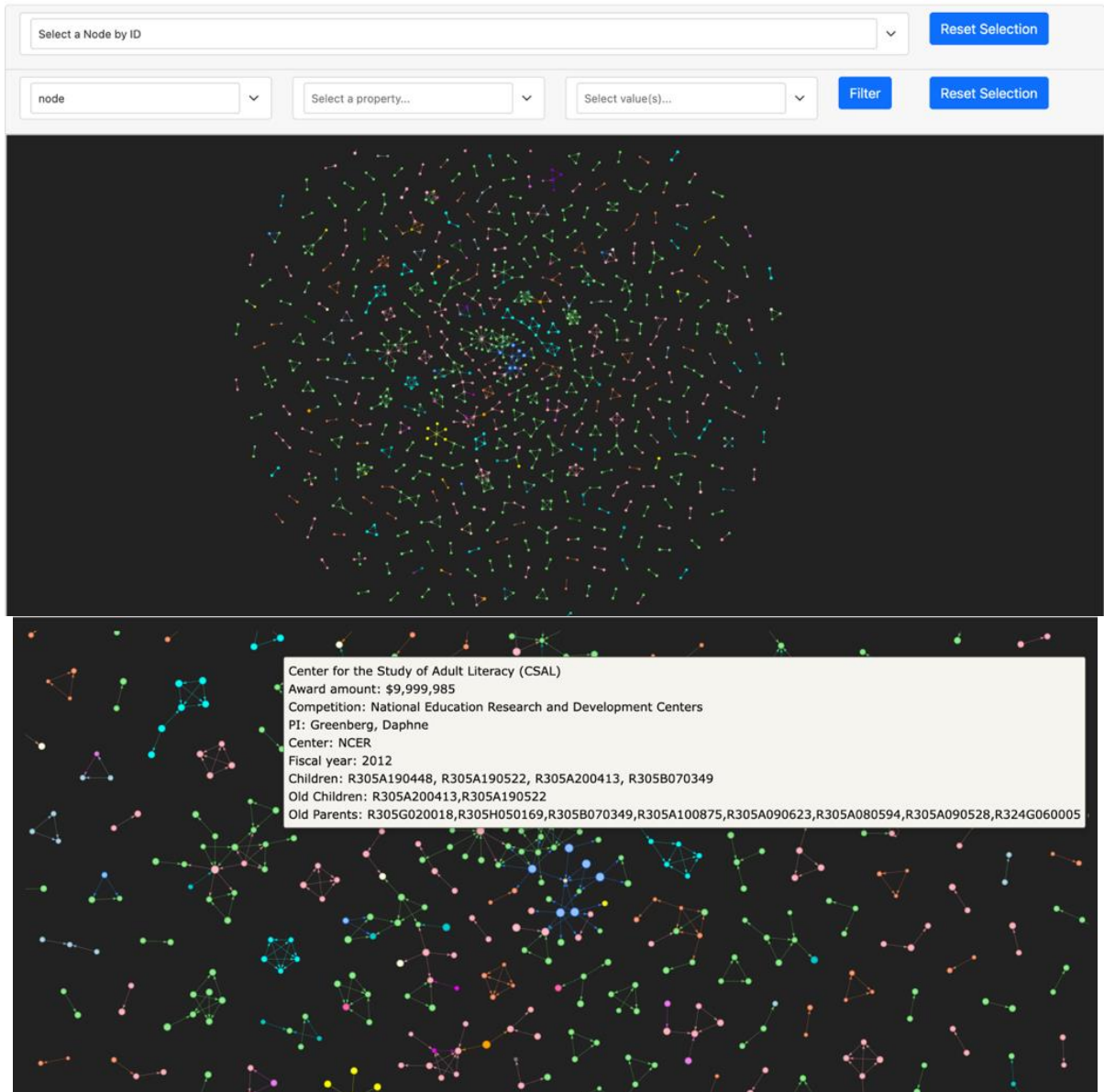
Award Spreadsheet Lookup + Network

Issue:

IES staff need to determine which projects are related to one another, but the existing raw data is incomplete. Parent-Child relations are not always captured. Due to this, the related families are incorrect and incoherent within the grant search system.

Award	R305A110143
IES ID	1139
Fund type	Grant
Center name	NCER
Fiscal year	2011
Program Officer-COR	Elizabeth Albro
Award number	R305A110143
Title	A Toolkit for Identifying and Assessing Socially Rejected Children
Award amount	\$2,325,731.00
Supplemental funding	0
OrigAward+Supplement	2325731
Principal investigator	McKown, Clark
Grantee institution/co	Rush University Medical Center
Grantee institution/co	IL
Grant search link	http://ies.ed.gov/funding/grantsearch/details.asp?ID=1139
Competition	Education Research
Topic/Strand	Social and Behavioral Context for Academic Learning
Project Type/Goal	Measurement;#9
Disability area	_Not applicable;#30
Related	Extension or predecessor of another IES-funded project
Related children	R305A160053;#2253
Related parent(s)	
Modifications and acti	
Updates and changes	0
Award period in mont	48
Item Type	false
Path	Closed
Child Check	91990022C0040, R305A200220, R305A160053
Parent Check	
Child Final	91990022C0040, R305A160053, R305A200220
Parent Final	
Co-Parent	91990021C0028, R305A150189, R305A160053, R305A200463
R1 (Related)	91990021C0028,91990022C0040,R305A150189,R305A160053,R305A200220,R305A200463
R2	91990021C0028,91990022C0040,R305A110143,R305A150189,R305A160053,R305A200220,R305A200463
R3	91990021C0028,91990022C0040,R305A110143,R305A150189,R305A160053,R305A200220,R305A200463
R4	91990021C0028,91990022C0040,R305A110143,R305A150189,R305A160053,R305A200220,R305A200463
R5	91990021C0028,91990022C0040,R305A110143,R305A150189,R305A160053,R305A200220,R305A200463

Elevated data quality by cleaning the incomplete input for the recorded children and parent awards, allowing for a lookup tool to be built.



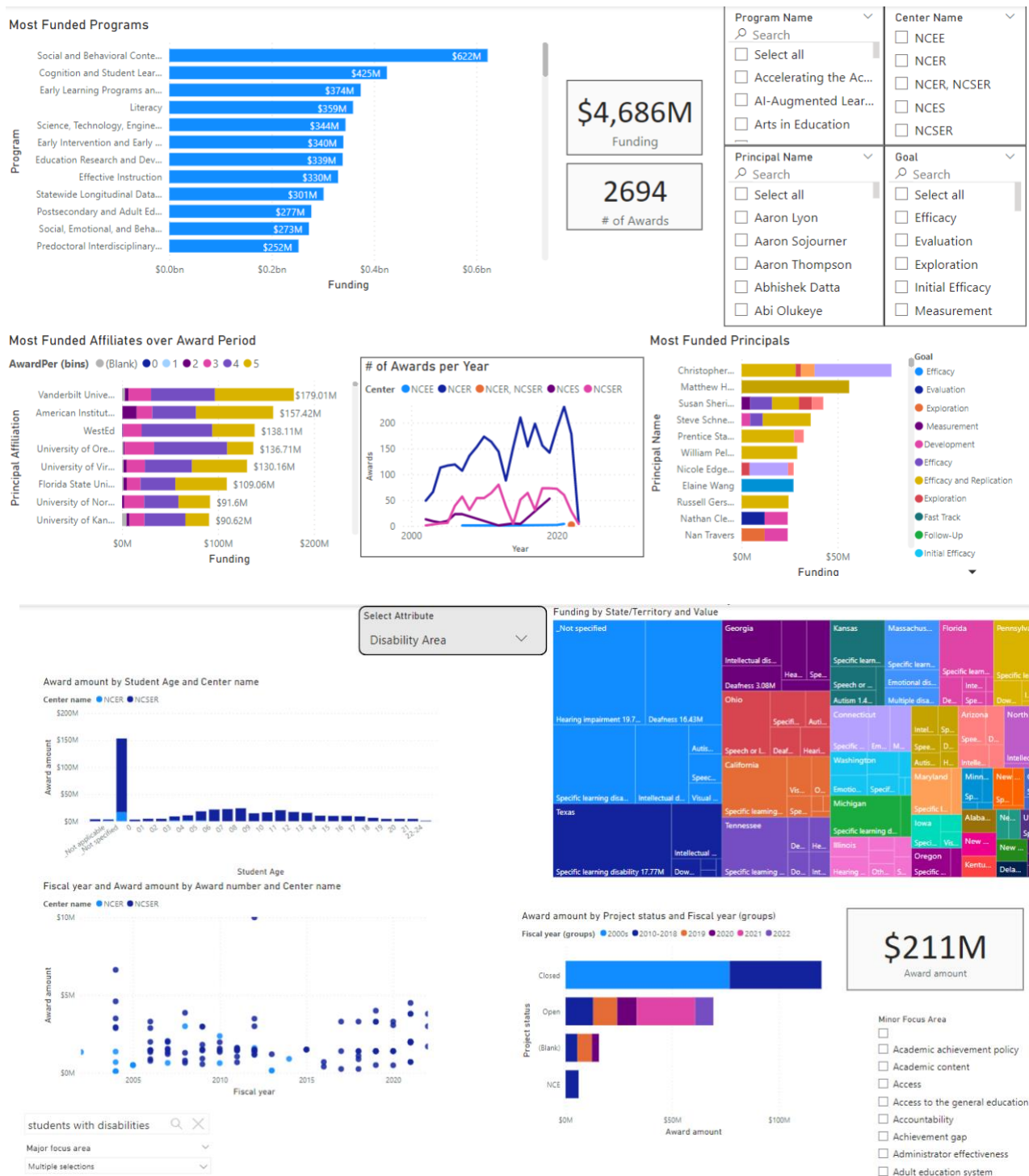
I created a visualization to present the award connections, so IES staff can easily see relationships and related awards to improve the ability to find similar awards and build off their findings in research as well as see how awards have sprouted from each other throughout time.

Award BI Dashboard

*some information missing due to PII

Issue:

IES staff need to be able to identify grants and contracts that have similar research foci or that share other features that IES staff need to report on or analyze.




Field App

Screenshots of the field app I independently developed over the summer for safety forms, material requests, employee actions, and document viewing for 50+ employees.

Projects / Modules / Submissions

Projects


Search



City of Knowledge

19-029


>



Kindred Ontario VSI 3 & 4

19-036


>



Kindred SGV HVAC Replacement

20-017


>



Manhattan Beach Kinecta

20-097


>



5559 Burton Ave

21-034


>



La Brea Lofts

21-041


>



Park Reseda

21-048


>



Kindred Ontario Pyxis

21-055


>



Kinecta Gardena

21-058

>




Kindred Paramount (ARU)

21-059

>


<

What do you need to do?




Daily JHA

>




Weekly Safety Talks

>




Weekly Temp Power Checklist

>




Weekly Safety Inspection

>




Inspection (Request & Report)

>




Fall Protection Plan

>




Employee Actions

>




Safety Orientation

>



Safety Incident Report (SIR)

>



Lockout/Tagout

>

Field Impacts

11/17/2021 3:44 PM

Field Directive (T&M) - Change Work

ID: 168

Signed? Yes

>

11/16/2021 3:45 PM

Field Directive (T&M) - Change Work

ID: 167

Signed? Yes

>

11/16/2021 3:45 PM

Field Directive (T&M) - Change Work

ID: 166

Signed? Yes

>

11/16/2021 3:38 PM

Field Directive (T&M) - Change Work

ID: 165

Signed? No

>

11/16/2021 3:37 PM

Field Directive (T&M) - Change Work

ID: 164

Signed? Yes

>

11/16/2021 3:14 PM

Field Directive (T&M) - Change Work

ID: 163

Signed? No

>

11/16/2021 3:08 PM

Field Directive (T&M) - Change Work

ID: 162

Signed? No

>

Forms and Actions

< JHA

☐ No Work

☒

Hazards

Search items

Cuts, crush, pinch, etc. during operation

+

Dark work areas when power turned off

+

Elevated noise level

+

Falls from ladders

+

Fire and Emergency response

+


Fire and explosion while refueling

+

Mitigation/Reduction


Cuts, crush, pinch, etc. during operation an...

Keep protective guards in place; disconnect from power source before servicing; use lockout-tagout; use PPE; keep away from power lines



Falls from ladders

Select proper ladder; maintain 4:1 slope ratio with straight ladders; seek assistance in dangerous and high traffic areas; don't carry tools while climbing; extend 36" if climbing over roof; do not use top step of stepladder and



< Daily Report

☐ No Work

☒

* Project

20-097 Manhattan Beach Kinecta

* Report Date

6/2/2023

* Work Performed

Select item(s)

* Areas Worked

Select item(s)

* Crew

* Any Injuries

Meeting/Special Notes

< 21-092-001

☐ Close

☒

Search items

Isolation Point: Temp power panel

Adam C. Dome locked on 6/16/2022

>

Isolation Point: Temp power main

Adam C. Dome locked on 6/16/2022

>

< Employee Actions

☒

* Action Type

Termination

* Action Date

12/31/2001

Last Date Worked

12/31/2001


* Full Name

Rikesh Patel


Employee Number

34

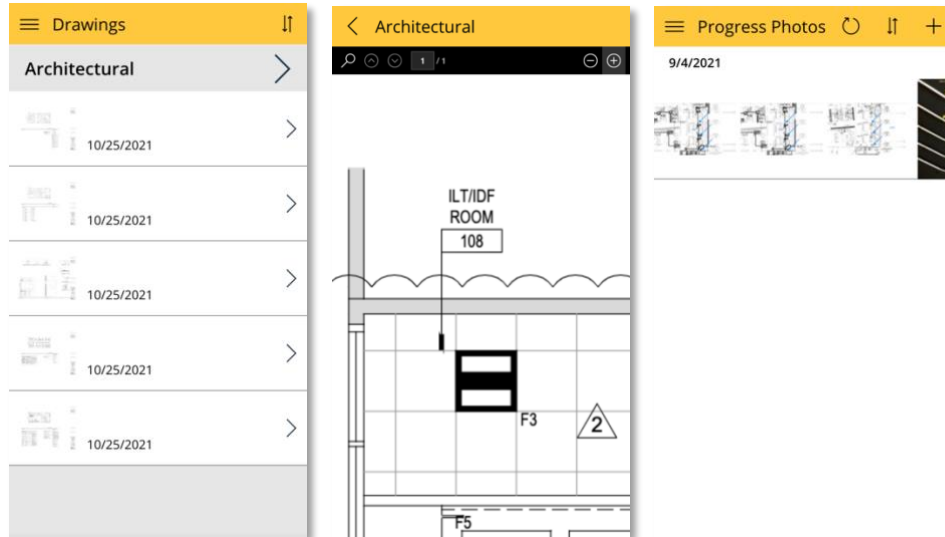
Employee Signature



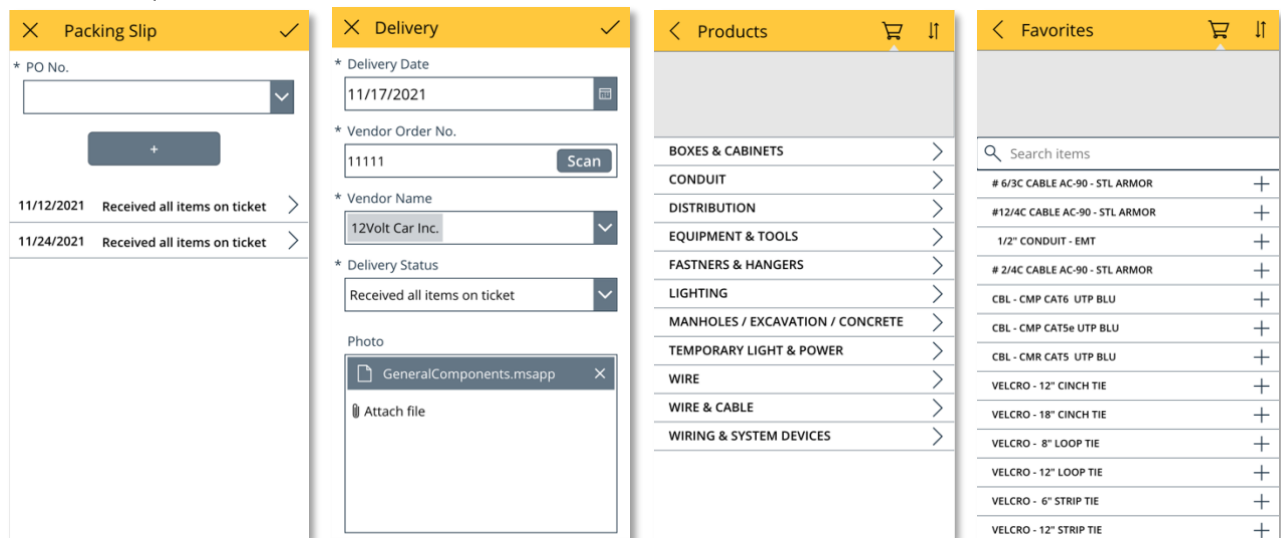
Signature



Document Viewer and Photo Upload



Material Requests



Search, Review, and Explore Restaurants (Website)

I was touring Greece and Rome and found that it was difficult for me to use Yelp to find nice places to eat. In frustration, I decided to create my own website to take advantage of reviews online as well as other data and piece it together to find the most suitable place to eat based on my query. I expanded this concept by implement NLP models, sentiment analysis, and adjective visualization to improve the user interaction.

Welp: Reviews and Ratings

by [Rikesh Patel](#)





Search Bar

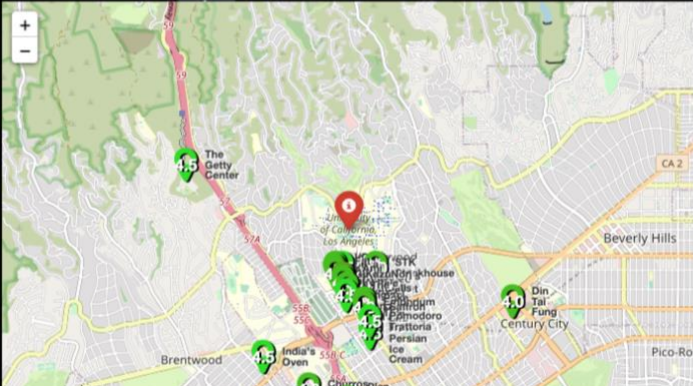
Type: ramen, tacos, pasta, burgers, chicken

UCLA

- University of California, Los Angeles, Westholme Avenue, Holmby Hills, Westwood, Los Angeles, Los Angeles County, CAL Fire Southern Region, California, 90095, United States
- UCLA, Marina del Rey, Los Angeles County, CAL Fire Southern Region, California, United States
- UCLA, Marina del Rey, Los Angeles County, CAL Fire Southern Region, California, 90296, United States
- UCLA, 4o Retorno del Roble, Villas del Álamo, Pachuquilla, Mineral de la Reforma, Hidalgo, 42184, México

Search

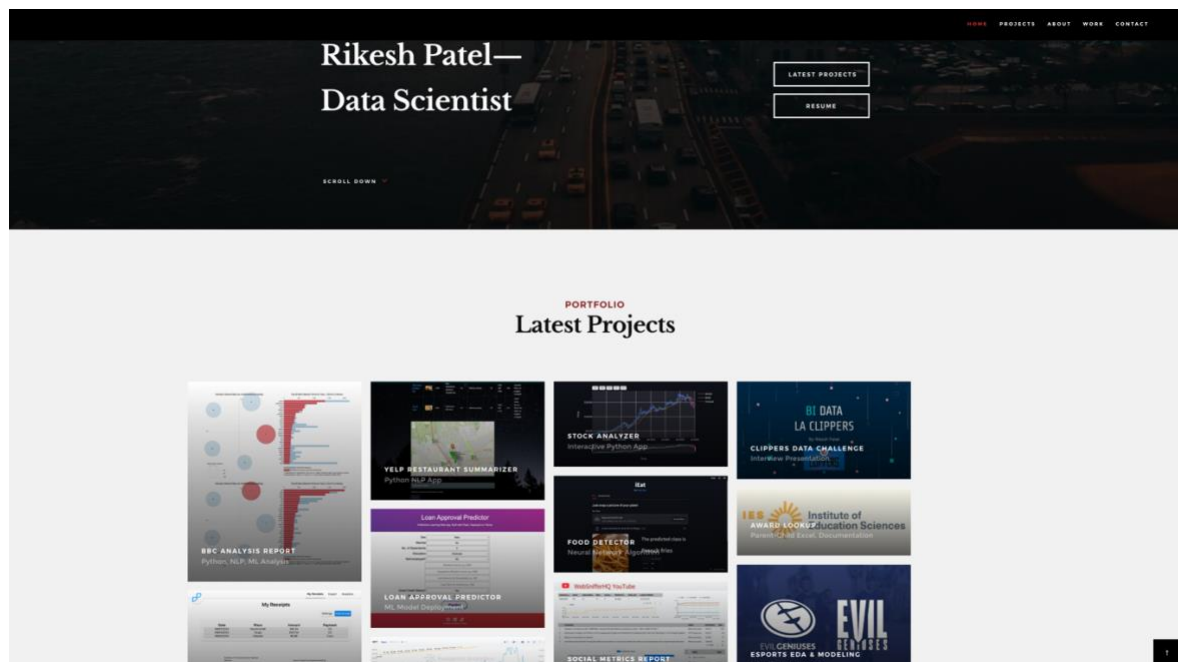
Name	Image	Reviews	Type	Rating	Transactions	Price	Phone	Miles	Address
Daddy Rice Cookies		5742	Desserts, Bakeries, Ice Cream & Frozen Yogurt	4.5	delivery, pickup	\$	(310) 208-0448	0.54	926 Broxton Ave, Los Angeles CA 900
In-N-Out Burger		891	Fast Food, Burgers	4.0	delivery	\$	(800) 786-1000	0.54	922 Gayley, Los Angeles CA 900
Bella Pita		830	Middle Eastern, Sandwiches, Mediterranean	4.0	delivery, pickup	\$	(310) 209-1050	0.57	960 Gayley Ave, Los Angeles CA 900
Pat Sals Deli		1406	Delis, Burgers, Sandwiches	4.0	delivery, pickup	\$\$	(310) 452-3220	0.58	972 Gayley Ave, Los Angeles



Portfolio Website

Filled with anticipation and eagerness, I embarked on the creation of my very own personal website - a project I had been yearning to undertake for quite some time. Finally, the opportunity had presented itself, and I threw myself into the task with gusto, determined to bring my unique vision to life.

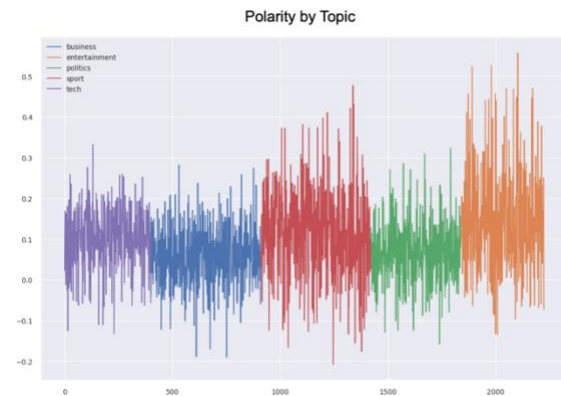
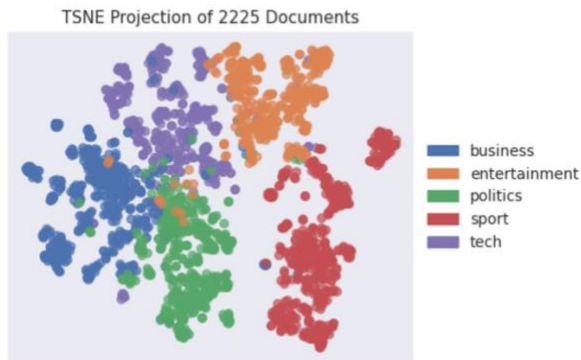
To do this, I used HTML, CSS, and JavaScript to set everything up. One of the most difficult features to implement was the changing backgrounds upon page refresh, but I persevered to get it to work, adamant on publishing the website only after I figured out how to set up this ostensibly trivial feature. It took much patience, but I finally found a solution. Then, I added mobile support for different screen resolutions and a contact screen page to accompany my resume.



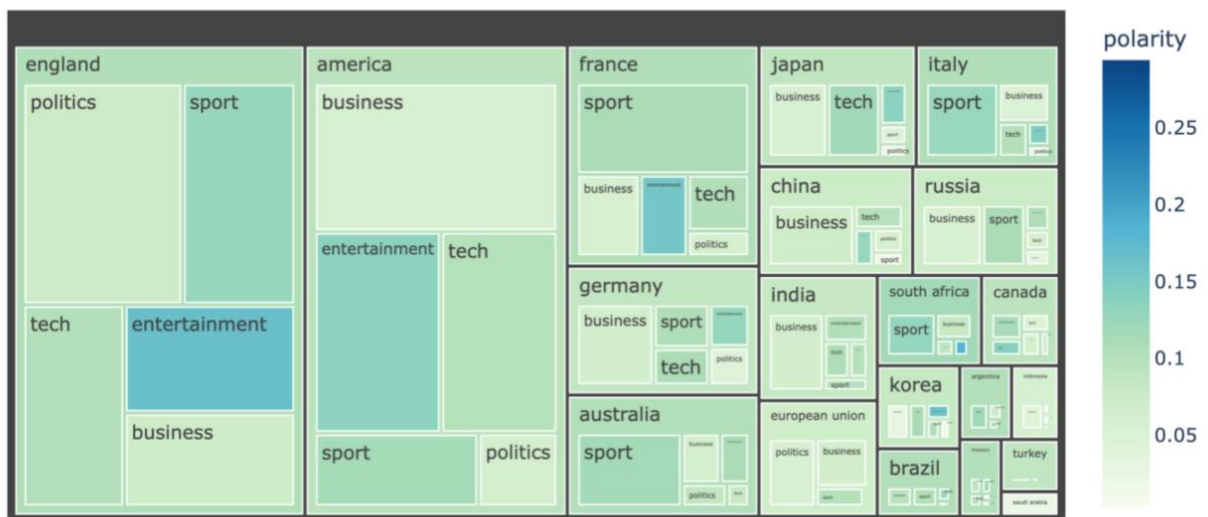
BBC News NLP Report

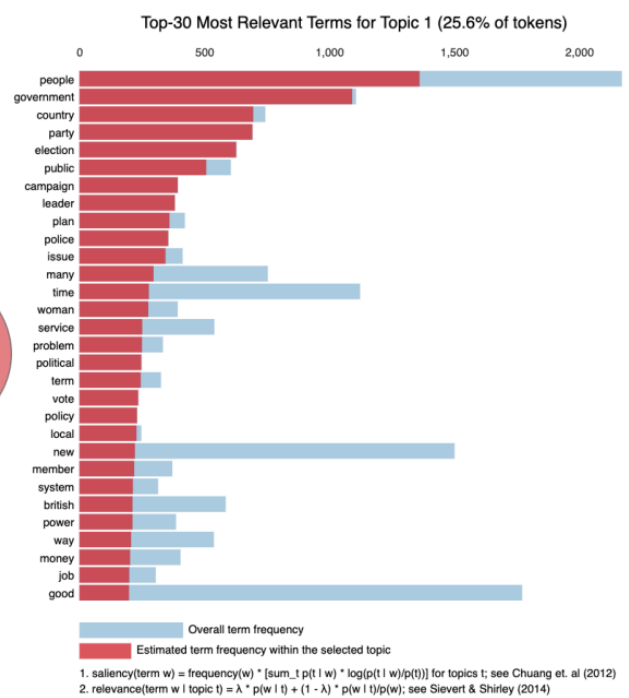
In this report based 2k BBC news articles, I answer a few questions, analyze country name dropping, look at sentiment and polarity, classify articles into topics, and more.

Article Similarity Distribution Visualization via t-SNE



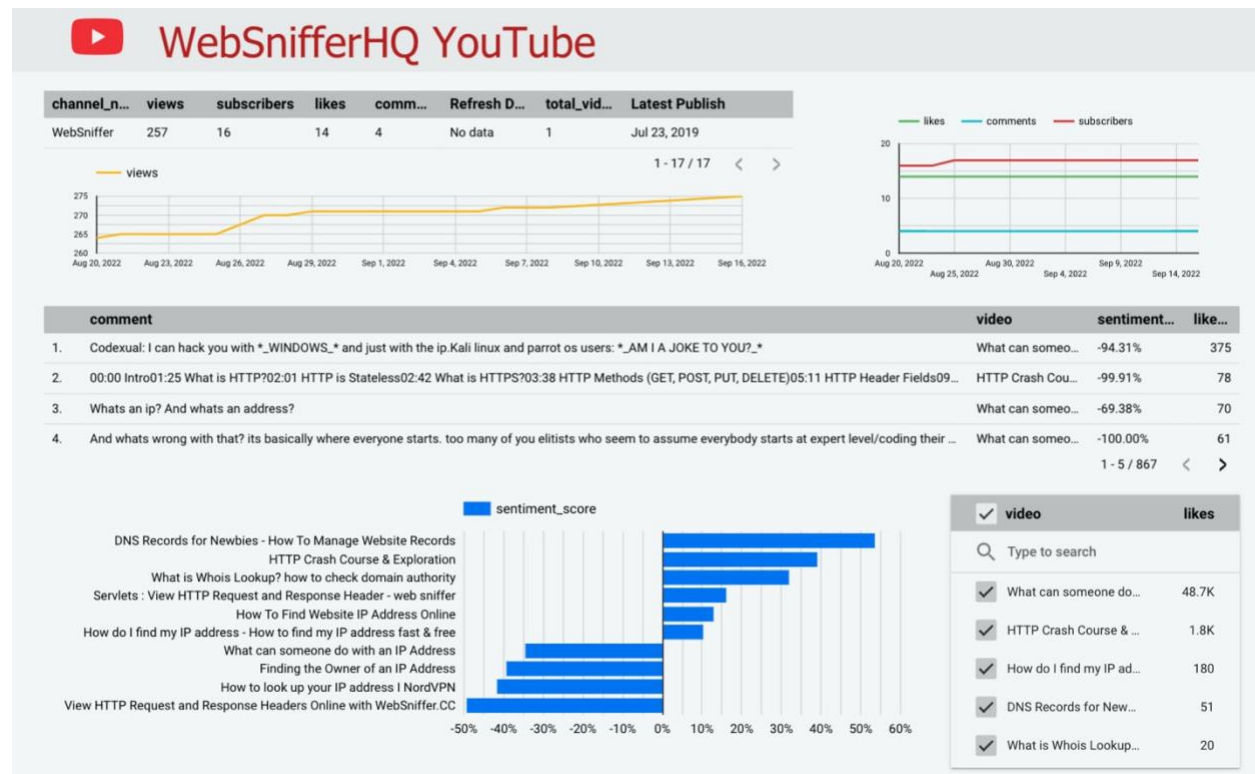
6 Treemap Distribution of Most Mentioned G20 Countries by Topic





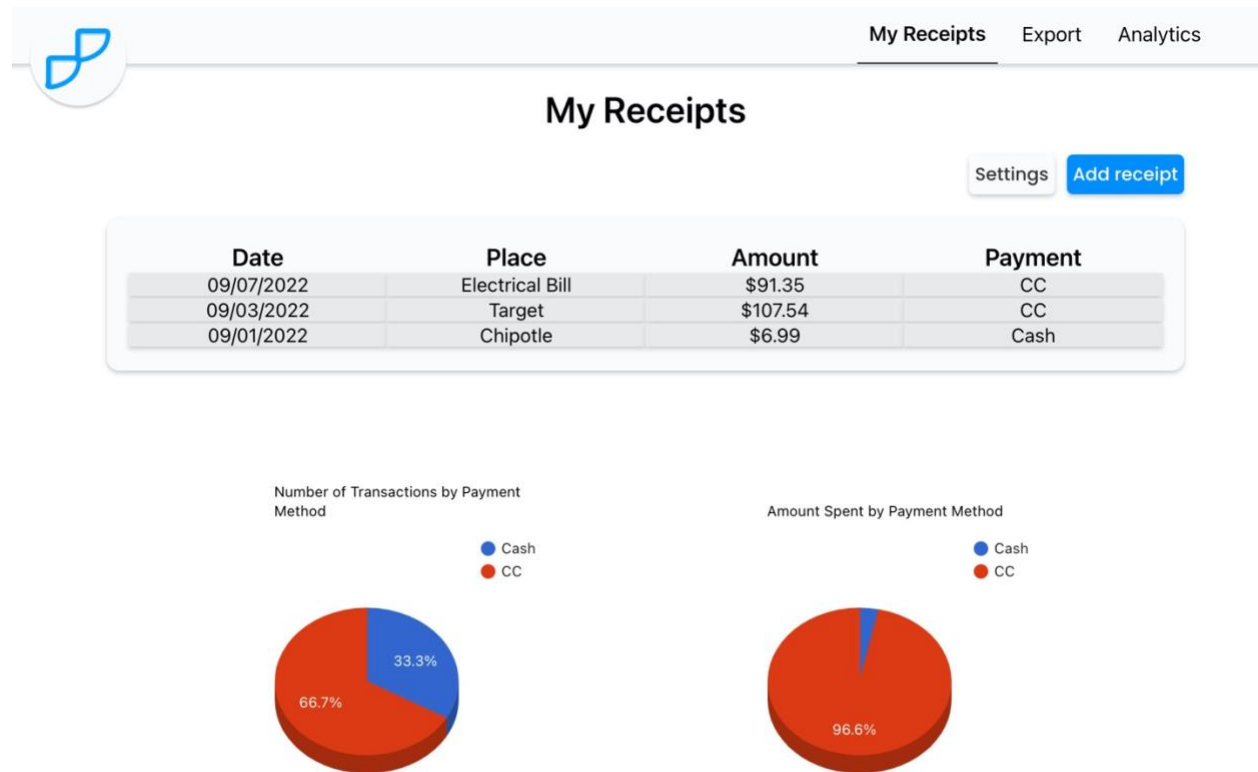
Socials Dashboard (Google Data Studio)

I was elected to be the Data Analytics Team Lead during my WebSniffer internship. I provided guidance to my team members while communicating with upper management. I helped my team by offering technical expertise and advice on data analysis, and I also worked with the team to identify and resolve any obstacles that arose. One of the key methods I helped the team achieve its goals was by providing clear communication: I ensured that everyone on the team understood their roles and responsibilities by working closely with the team to ensure that everyone had the resources they needed to be successful. Overall, my experience as a team lead taught me the value of collaboration and problem-solving in achieving team goals; I believe that these skills are essential for success in any team environment, and I am confident I can contribute these pillars to any future team I am accepted into.



Receipt OCR Website

Receipts are a transcript of all of our expenses, but many people choose to throw them anyway. I wanted to repurpose this nuisance of paper into useful statistical measurement of cost management. By creating a simple app to read receipts and transform their numbers into a report, I accomplished my initiative to add utility to something that has few immediate benefits.



Loan Predictor App

I created a simple framework to host my machine learning classification model. I thought that the finished product was a interesting display of the capabilities of machine learning, so I am happy to have created it.

Loan Approval Predictor

A Machine Learning Web App, Built with Flask, Deployed on Vercel.

Sex	<input type="text" value="Male"/>
Married	<input type="text" value="No"/>
No. of Dependents	<input type="text" value="0"/>
Education	<input type="text" value="Graduate"/>
Self-employed?	<input type="text" value="No"/>
	<input type="text" value="Monthly Income e.g. 2400"/>
	<input type="text" value="Coapplicant Monthly Income eg. 2400"/>
	<input type="text" value="Loan Amount (in thousands) e.g. 300"/>
	<input type="text" value="Loan Term (in months) e.g. 360"/>
Good Credit History?	<input type="text" value="Yes"/>
Property Area	<input type="text" value="Urban"/>

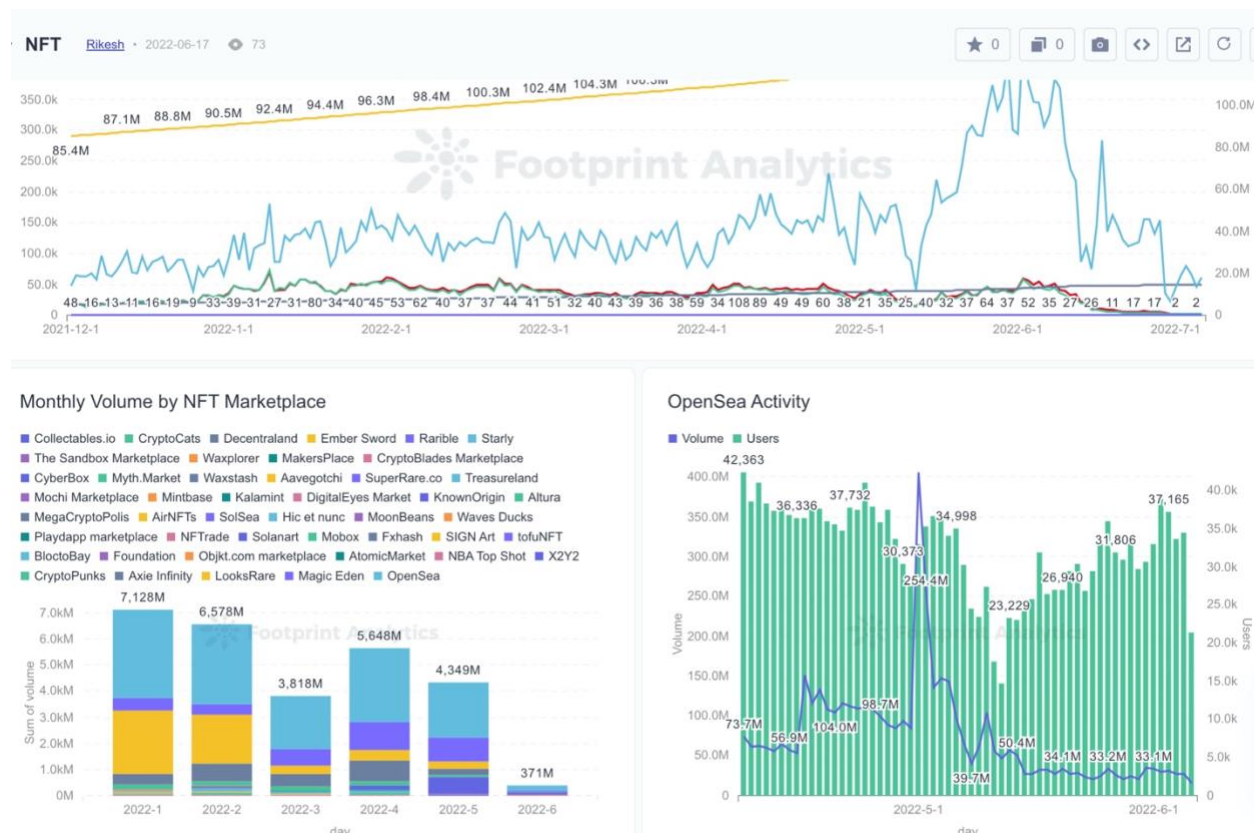
Predict



Created by Rikesh Patel.

NFT Market Analysis

While researching cryptocurrencies during my internship with Fayble Inc., I decided to create a dashboard on my own time to capture the state of the market. We had weekly presentations, and I thought this dashboard would serve well in tying my conclusions together, especially as a showcase of the market to my clients in the audience.



Stock Analyzer



Food Image Recognition

I needed to track my caloric intake and nutritional gain for my Nutrition class, and I thought of the perfect solution: Neural networks! I used a set of 100 common food images to train my model and built a Streamlit app to be its framework.

