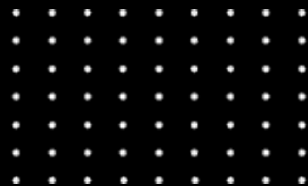


*Introduction to Machine Learning,
Personal Project*

“
WHAT WILL I BINGE

THIS SUMMER?

”



- ✓ **CLEAN DATA**
- ✓ **CREATE CLUSTERING OF USERS**
- ✓ **RECOMMEND MOVIES**
- ✓ **MAKE A NICE POWERPOINT**
- ✓ **OUTLINE NEXT STEPS**



DELIVERABLES



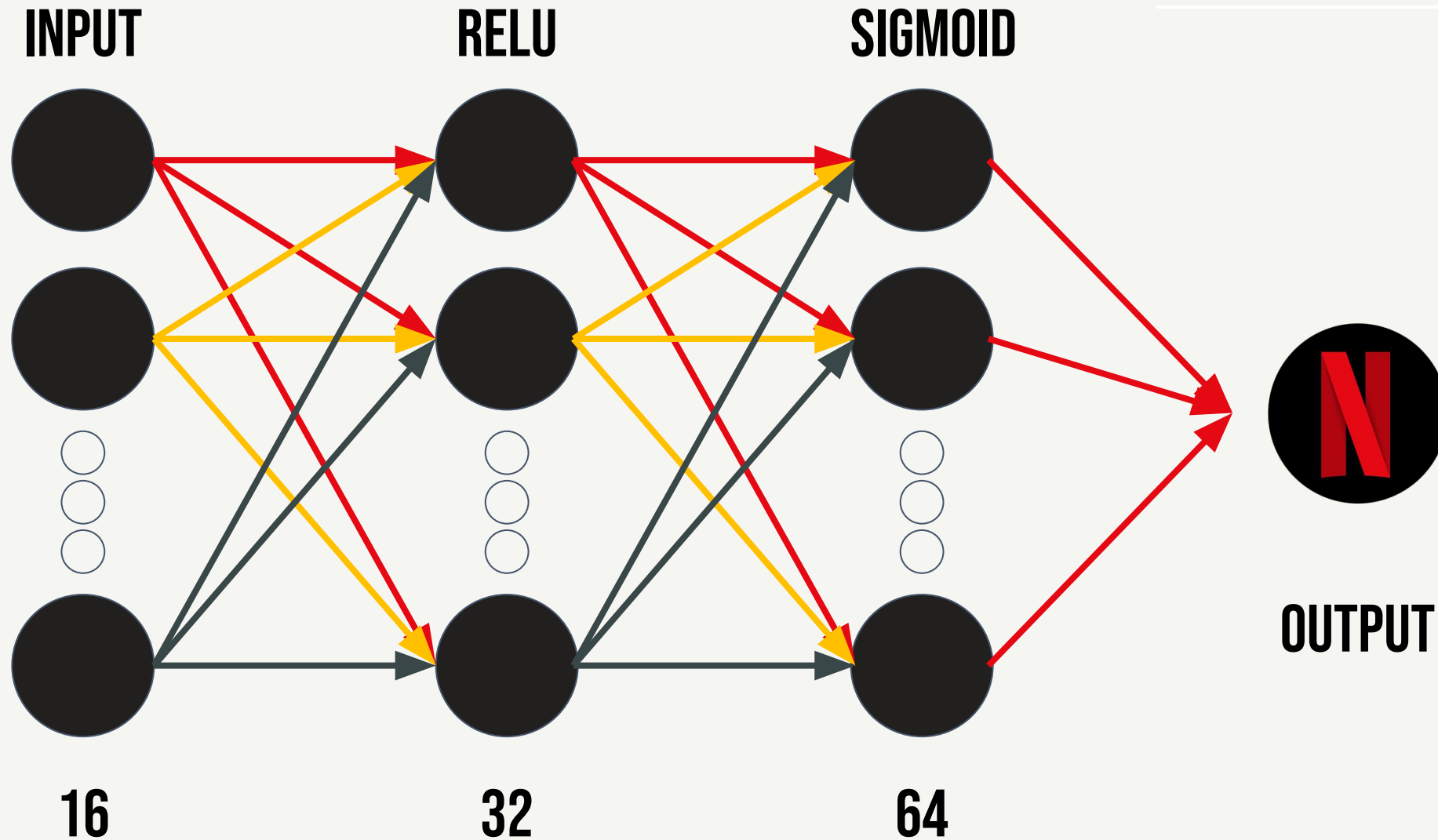
ISSUES WITH DATA

	userId	itemId	rating	timestamp
0	196	242	3	881250949
1	186	302	3	891717742
2	22	377	1	878887116
3	244	51	2	880606923
4	166	346	1	886397596

	userId	age	gender	occupation	zip
0	1	24	M	technician	85711
1	2	53	F	other	94043
2	3	23	M	writer	32067
3	4	24	M	technician	43537
4	5	33	F	other	15213

	movieId	title	movieRelease	videoRelease	imdb	unknown	action	adventure	animation	children	...	fantasy	noir	horror	mu
0	1	Toy Story (1995)	01-Jan-1995	NaN	http://us.imdb.com/M/title-exact?Toy%20Story%2...	0	0	0	1	1	...	0	0	0	
1	2	GoldenEye (1995)	01-Jan-1995	NaN	http://us.imdb.com/M/title-exact?GoldenEye%20(...	0	1	1	0	0	...	0	0	0	
2	3	Four Rooms (1995)	01-Jan-1995	NaN	http://us.imdb.com/M/title-exact?Four%20Rooms%...	0	0	0	0	0	...	0	0	0	
3	4	Get Shorty (1995)	01-Jan-1995	NaN	http://us.imdb.com/M/title-exact?Get%20Shorty%...	0	1	0	0	0	...	0	0	0	
4	5	Copycat (1995)	01-Jan-1995	NaN	http://us.imdb.com/M/title-exact?Copycat%20(1995)	0	0	0	0	0	...	0	0	0	

ORIGINAL APPROACH



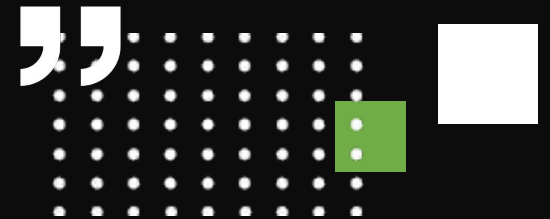


Quote Slide

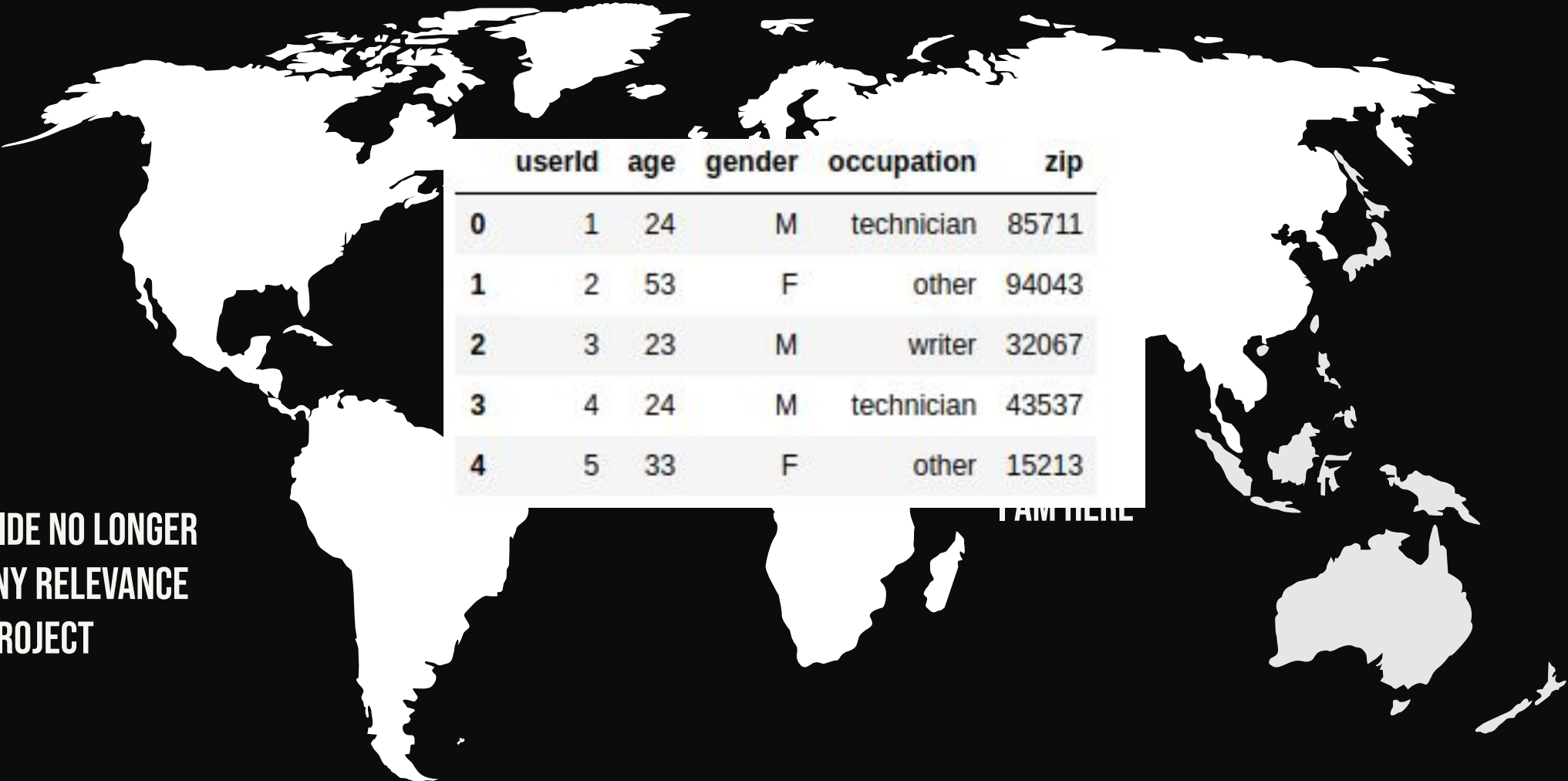


“Dear God why is this not working?”

~ Pedro @4am outside library



This is a Map*

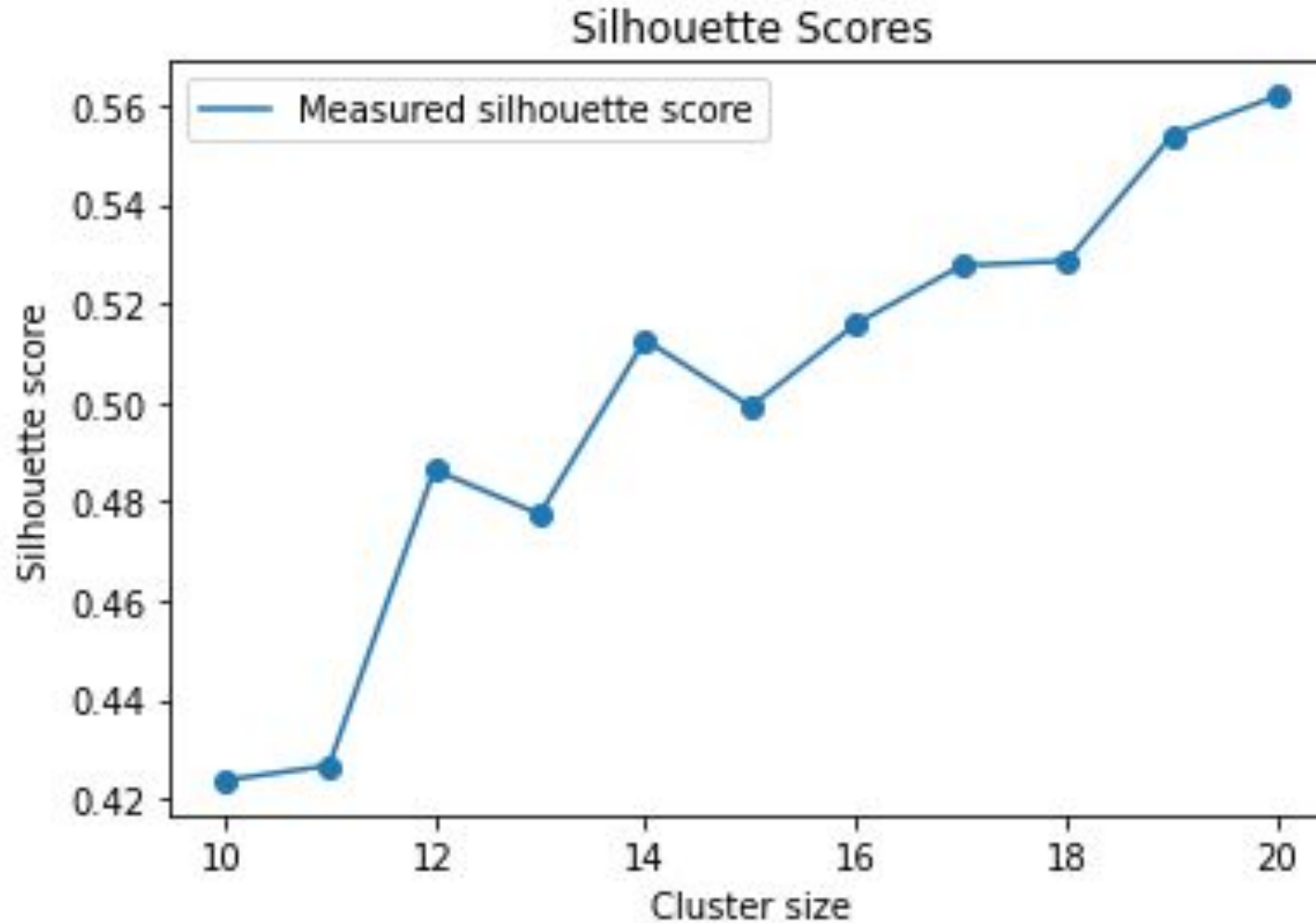


	userId	age	gender	occupation	zip
0	1	24	M	technician	85711
1	2	53	F	other	94043
2	3	23	M	writer	32067
3	4	24	M	technician	43537
4	5	33	F	other	15213

***THIS SLIDE NO LONGER
BEARS ANY RELEVANCE
TO THE PROJECT**



CREATING CLUSTERS



**SILHOUETTE SCORE:
MEASURE OF HOW SIMILAR
OBJECTS ARE TO THEIR OWN
CLUSTER**



**MAYBE EVEN MORE THAN 20
CLUSTERS WOULD BE IDEAL**

RESULTS FOR USER 494

- ✓ **STAR WARS, JURASSIC PARK, AND INDIANA JONES CLUSTERED TOGETHER**
- ✓ **THIS IS HIS/HER FAVORITE CLUSTER, MORE MOVIES CAN BE GENERATED**

movieid		title
1	2	GoldenEye (1995)
20	21	Muppet Treasure Island (1996)
23	24	Rumble in the Bronx (1995)
28	29	Batman Forever (1995)
49	50	Star Wars (1977)
61	62	Stargate (1994)
81	82	Jurassic Park (1993)
100	101	Heavy Metal (1981)
109	110	Operation Dumbo Drop (1995)
116	117	Rock, The (1996)
117	118	Twister (1996)
147	148	Ghost and the Darkness, The (1996)
171	172	Empire Strikes Back, The (1980)
172	173	Princess Bride, The (1987)
173	174	Raiders of the Lost Ark (1981)
180	181	Return of the Jedi (1983)
183	184	Army of Darkness (1993)
200	201	Evil Dead II (1987)
209	210	Indiana Jones and the Last Crusade (1989)
221	222	Star Trek: First Contact (1996)
226	227	Star Trek VI: The Undiscovered Country (1991)
227	228	Star Trek: The Wrath of Khan (1982)
228	229	Star Trek III: The Search for Spock (1984)
229	230	Star Trek IV: The Voyage Home (1986)
230	231	Batman Returns (1992)
253	254	Batman & Robin (1997)
256	257	Men in Black (1997)

movieid		title
0	13	Mighty Aphrodite (1995)
1	25	Birdcage, The (1996)
2	26	Brothers McMullen, The (1995)
3	40	To Wong Foo, Thanks for Everything! Julie Newm...
4	41	Billy Madison (1995)
5	42	Clerks (1994)
6	67	Ace Ventura: Pet Detective (1994)
7	72	Mask, The (1994)
8	80	Hot Shots! Part Deux (1993)
9	85	Ref, The (1994)