Your Personal Movie Guru: Discover, Watch, Love!

CINECIPHER
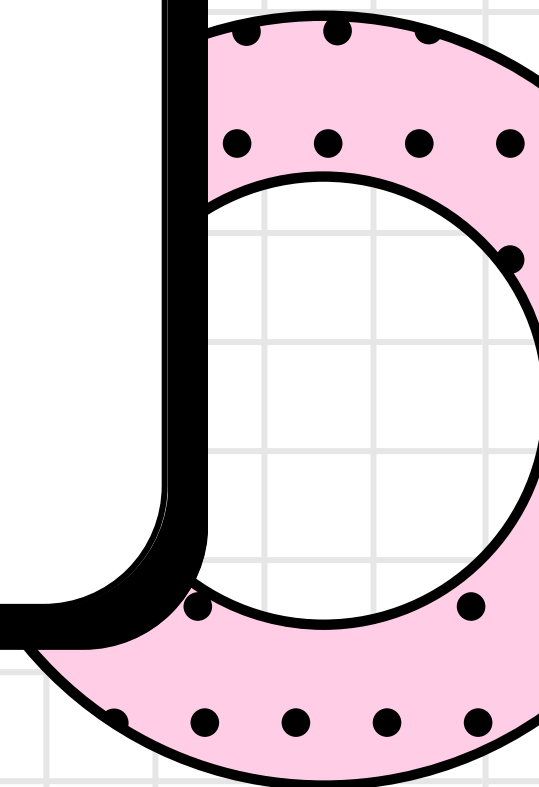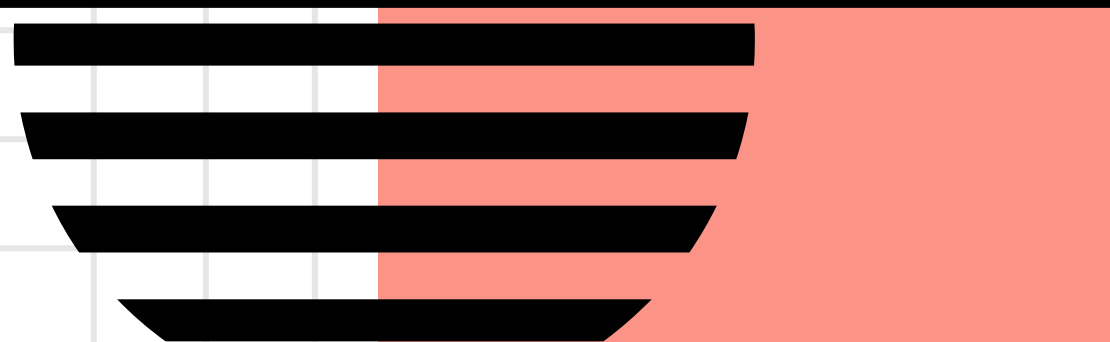
Get to know our team

Kanishka Ghodke

Trishala Thakur

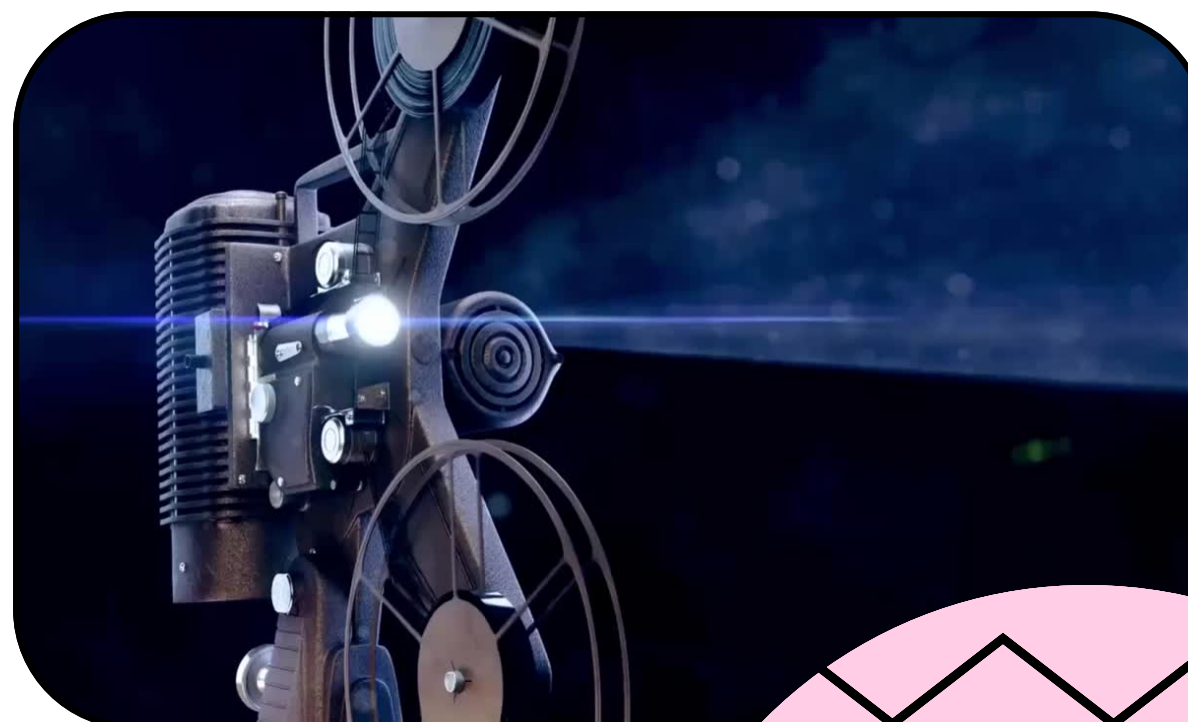**Bhuvvaan**

Anudeep Nayak

Nikhil Rowland

Siddharth

What is Cinecipher about?

Retrieving relevant movie titles using semantic search based on the concept of Natural Language Processing (NLP) and recommending movies to the user.

Lexical Engines

-Look for literal matches of query

-Can't deal with the ambiguity of "out of vocabulary" searches

-Poor quality search results

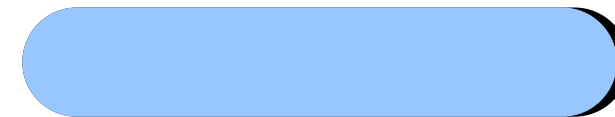-Couldn't keep up with the rapid growth of web content and increasing complexity of user queries
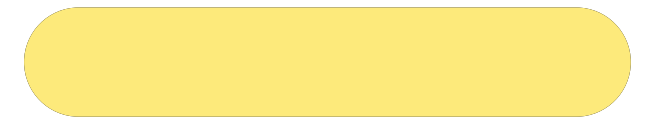
Why ?

Coz who doesn't love watching movies?

Wrong spelling

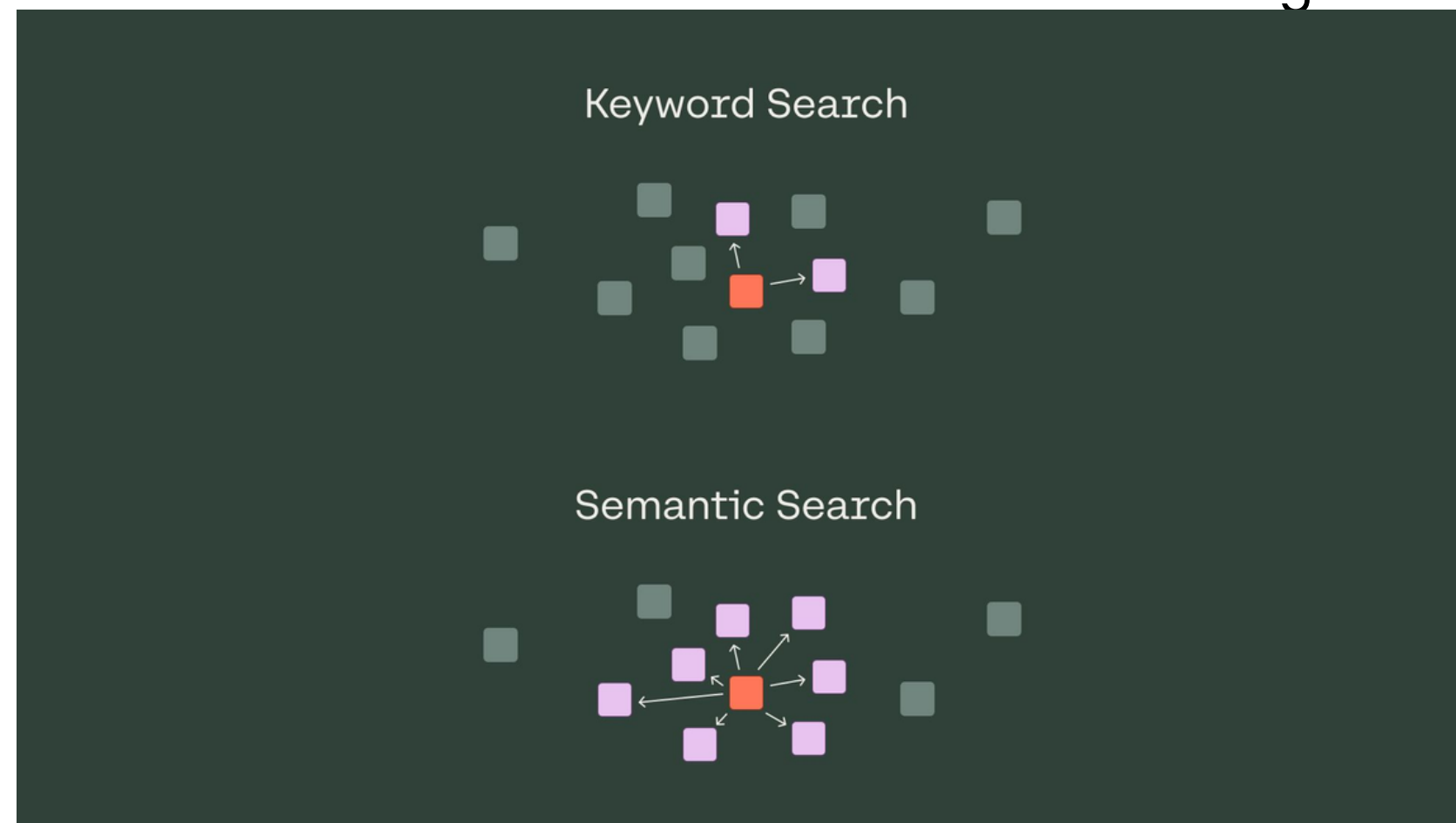People forget titles

Better Search Engine

Gives similar recommendation

Semantic Search

Searching technique which uses the intent and contextual meaning behind a search query to deliver more relevant results.
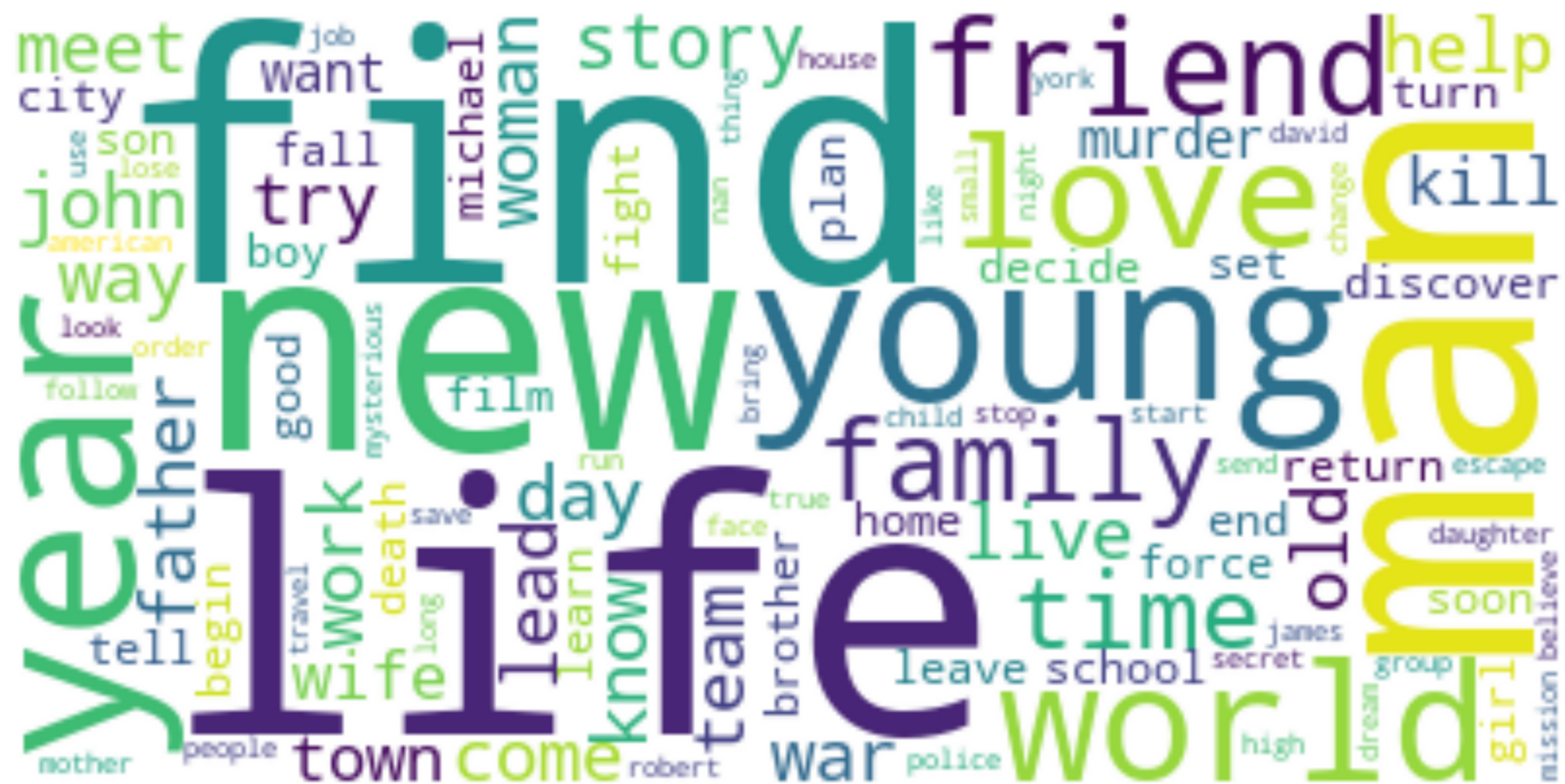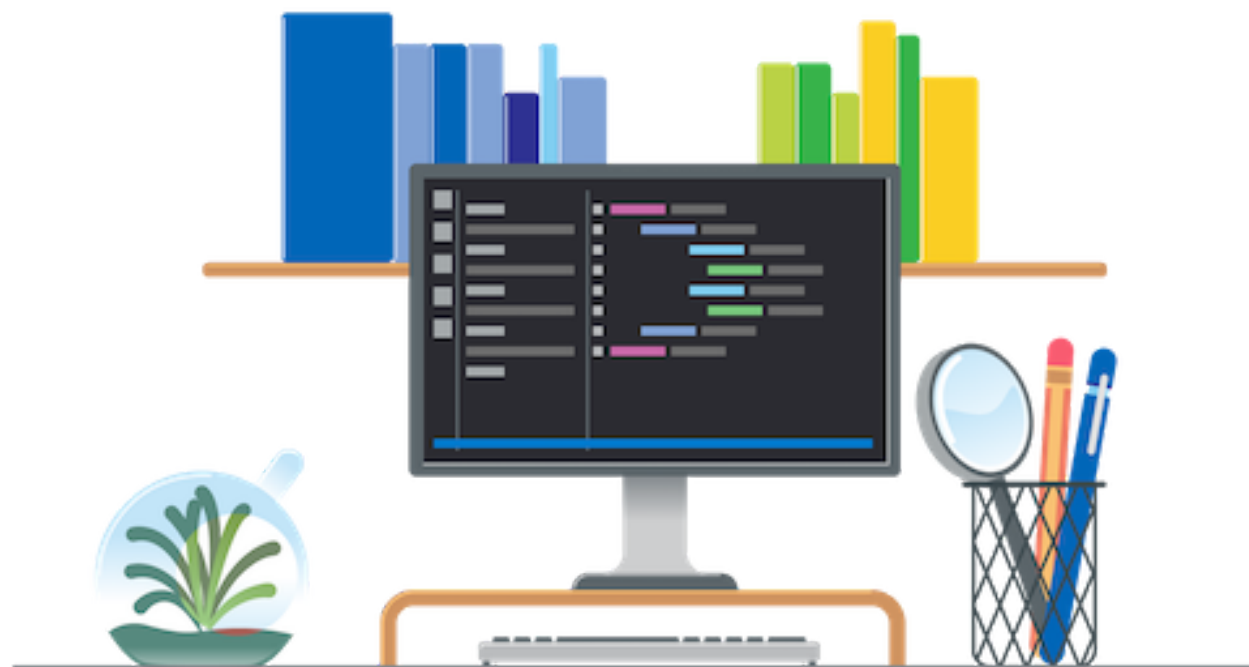Uses Latent Semantic Indexing

Word Cloud

Demo

```
search_similar_movies('magician rivals')
```

	Relevance	Movie Title	Movie Plot
0	63.20	The Prestige	Christopher Nolan Christian Bale, Hugh...
1	45.44	Oz the Great and Powerful	Sam Raimi anco, Michelle Williams, Ra...
2	37.85	Jaadugar	Sameer Saxena ndra Kumar, Arushi Sharm...
3	37.75	An Honest Liar	Tyler Measom, Justin Weinstein James ...
4	37.72	Derek DelGaudio's In & Of Itself	Frank Oz Gaudio, Hal Schulman, Jason ...

```
search_similar_movies('atomic bomb russia nolan')
```

	Relevance	Movie Title	Movie Plot
0	61.07	Red Joan	Trevor Nunn ench, Sophie Cookson, Ste...
1	56.58	Oppenheimer	Christopher Nolan Cillian Murphy, Emil...
2	53.33	Walk a Crooked Mile	Gordon Douglas is Hayward, Dennis O'Ke...
3	52.22	Reds	Warren Beatty en Beatty, Diane Keaton,...
4	38.57	At Home Among Strangers, a Stranger Among His Own	Nikita Mikhalkov uriy Bogatyryov, Anat...

```
search_similar_movies('mutants super power')
```

	Relevance	Movie Title	Movie Plot
0	57.66	X-Men: Apocalypse	Bryan Singer McAvoy, Michael Fassbende...
1	52.89	X2	Bryan Singer ck Stewart, Hugh Jackman,...
2	50.95	Logan	James Mangold Jackman, Patrick Stewart...
3	49.21	X-Men: The Last Stand	Brett Ratner ck Stewart, Hugh Jackman,...
4	46.19	X-Men Origins: Wolverine	Gavin Hood ckman, Liev Schreiber, Rya...

What goals can data science help achieve?

In the entertainment domain!

Audience Engagement	Content Optimization	Box Office Predictions	Better User Experience
recommend personalized content, increasing viewer engagement and retention on streaming platforms.	Using Data-driven insights for better content	forecast box office performance, make informed marketing and release strategies for movies.	optimizing interfaces, suggesting relevant content, and enhancing navigation.
Viewer Insights	**Talent Discovery**	**Content Recommendation**	**Advertising Revenue**
Analyzing viewer feedback and social media sentiment for better content	identifying emerging actors, directors, and writers based on factors like social media trends and public reception.	To keep viewers engaged and can increase the time spent on streaming platforms.	target audiences more effectively, increasing advertising revenue

Companies in entertainment industry hiring Data Scientist

Netflix

Amazon Prime Video

IMDb

Hulu

Walt Disney

Sony Pictures
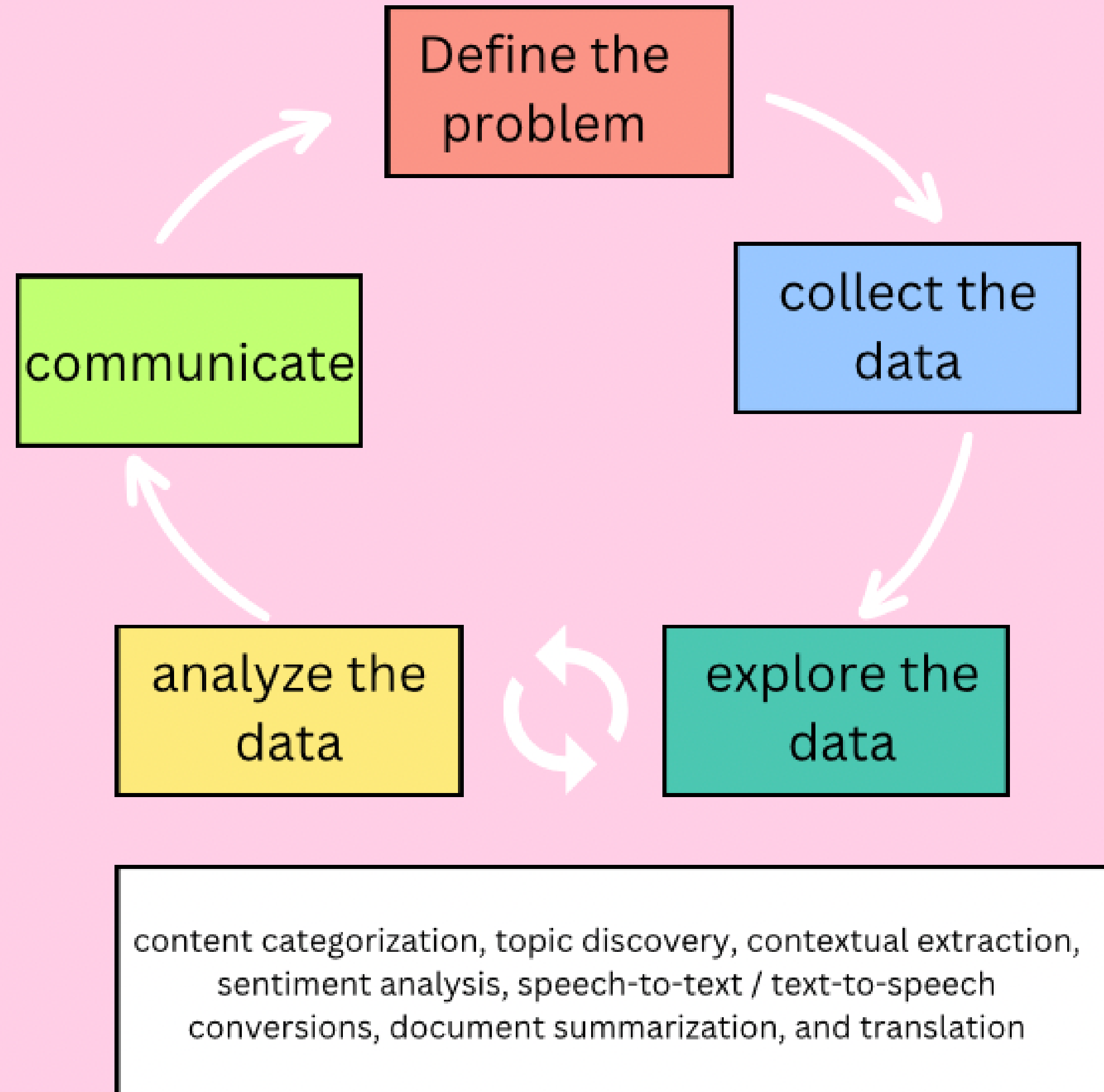
Universal Pictures

Roku

Spotify

A typical
day
of a
data
scientist
in
this domain

Define the
problem

collect the
data

communicate

explore the
data

analyze the
data

content categorization, topic discovery, contextual extraction,
sentiment analysis, speech-to-text / text-to-speech
conversions, document summarization, and translation

Skills needed to work in Entertainment domain

Skills	Mandatory	Recommended
Data Analytics	✓	
Statistical Modelling	✓	
NLP		✓
Domain Expertise	✓	
Programming - Python	✓	
Content Recommendation Systems		✓
Big Data Technologies like Hadoop, Spark, and NoSQL		✓

Elective courses that a students interested in this domain could take at CU

MSBX 5310: Customer Analysis
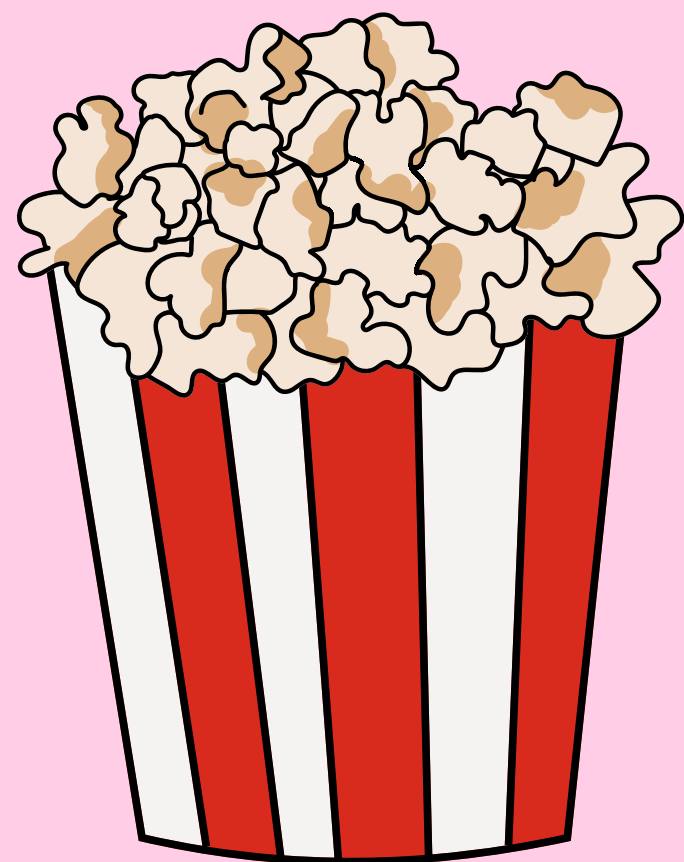
CSCI 5622 Machine Learning

CSCI 5832: Natural language processing

CSCI 6502:Big Data ANALYTICS

INFO 5612: Recommender Systems

CSCI 5922: Neural Networks & Deep Learning

THANK YOU