How many movies I've watched?
If you gave me a list of films made, I could check off a pretty penny off of those...
Have you recently tried to understand yourself?
Yes, every day. I call my mom every day... I would call my dad, but he's such a man. He's like there there's a problem let's fix the problem. Versus my mom is the typical like uh huh, I get it, mhm. Like, she listens.
Have you recently tried to understand yourself?
Lack of scalable and systematic methods to improve self-understanding
Alternatives

Online Psychological Tests
FULL LIST OF PSYCHOLOGICAL SCALES
By mohammed looti / March 19, 2023

- Aggression Questionnaire (AQ)
- Aggression Towards Parents—High Risk Behavioral Assessment
- Aggression, Temperament, and Personality Survey
- Aggression/Victimization Scale
- Aggression-Problem Behavior Frequency Scale
- Aggressive Behavior—SAGE Baseline Survey
- Aggressive Fantasies
- Anger and Support Scale (AAS)
- Anger and Support Scale (AAS)
- The Anger Expression Scale for Children (AESC)
- Anger Management Scale
- Behavioral Anger Response Questionnaire (BARQ)
- Beliefs About Aggression and Alternatives
- Beliefs Supporting Aggression Scale
- Buss-Durkee Hostility Inventory (BDHI)
- Buss-Perry Aggression Questionnaire (AGQ)
- Cyberbullying and Online Aggression Survey
- DIVERSE ADOLESCENT RELATIONAL AGGRESSION SCALE
- Homonegative Microaggressions Scale (HMS)
- Impulsivity—Teen Conflict Survey
- Instrument for Reactive and Proactive Aggression (IRPA)
- The Level of Anger Scale (LAS)
- Lound, Loukas, & Robinson Relational Aggression Subscale
- Attitudes About Marriage
Alternatives

Online Psychological Tests

Therapists
Help a large number of people better understand themselves.
Target User Group

Movie Enthusiasts?
Target User Group

Movie Enthusiasts?

Fiction and Social Cognition: The Effect of Viewing Award-Winning Television Dramas on Theory of Mind
<table>
<thead>
<tr>
<th>Method</th>
<th>Asked a variety of questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants</td>
<td>8 movie enthusiasts</td>
</tr>
<tr>
<td>Purpose</td>
<td>How movies help people make sense of their life</td>
</tr>
<tr>
<td>Results</td>
<td>A valuable prompt</td>
</tr>
</tbody>
</table>
Which movie made the deepest impact on you and why?
“Star Wars” made me wanna be a Jedi.
...and I don’t think I realized it back then but I'm someone who is very resilient in life... and that's very close to the character of Luke Skywalker. He’s almost naive sometimes and I’m like that...I’m very much like that.
High Time and Effort
User Study 2 - Purpose

Which movie made the deepest impact on you and why?
To heal from loss
To fulfill familial expectations
To find justice
To belong and connect
To use his talents for a greater good

Belonging
Adventure and Knowledge
Friendship
Recognition

Belonging and Family Unity
Adventure and Escapism
Personal Valor and Heroism
Restoration and Peace
Acceptance and Recognition
To heal from loss
To fulfill familial expectations
To find justice
To **belong** and connect
To use his talents for a greater good

**Belonging**
Adventure and Knowledge
Friendship
Recognition

**Belonging** and Family Unity
Adventure and Escapism
Personal Valor and Heroism
Restoration and Peace
Acceptance and Recognition
In preparation for our conversation, could you please take a moment to reflect on and send me:

**a list of movies that made a deep impact on you.** I'm not looking for cinematic masterpieces, but rather the movies that moved you personally.

This will help me prepare for our discussion. Thanks!

Boyhood
Veronica (Romanian)
Mrs doubtfire
Some like it hot
Legally blonde
My big fat Greek wedding
Sound of music

Thanks!
User Study 2 - Method

GPT-4 API to conduct character analysis

```python
In 1:
# Initialize
from openai import OpenAI
import os
client = OpenAI(api_key=os.environ.get("OPENAI_API_KEY", ""))


# Specify folder to save the txt file
folder = "Users/saurabhchandra/Documents/Movie Characteristics/Chris/"

# GPT Models
# get-4-0125-preview
# get-3-5-turbo-0125
model="get-4-0125-preview"
model2="get-3-5-turbo-0125"
full_list = ""

# Using a loop to print all characteristics of each movie
for movie in movies:
    # Character analysis code here
```
<table>
<thead>
<tr>
<th>User Study 2 - Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flaws</strong></td>
</tr>
<tr>
<td><img src="image1.png" alt="Big Hero 6" /></td>
</tr>
</tbody>
</table>

GPT-4 API to conduct character analysis
User Study 2 - Method

GPT-4 API to find Patterns

- **Belonging and Acceptance**
  - *Big Hero 6*: To belong and connect.
  - *Pan's Labyrinth*: A sense of belonging and love.
  - *Harry Potter and the Philosopher's Stone*: Belonging.
  - *Encanto*: Acceptance.
  - *The Chronicles of Narnia: The Lion, the Witch and the Wardrobe*: Belonging and Family Unity.

- **Personal Identity and Self-Worth**
  - *Big Hero 6*: To use his talents for a greater good.
  - *Pan's Labyrinth*: Acceptance of her true identity.
  - *The Shape of Water*: Acceptance.

- **Adventure and Escape from Reality**
  - *Pan's Labyrinth*: Escape from harsh realities.
  - *Harry Potter and the Philosopher's Stone*: Adventure and Knowledge.
  - *The Golden Compass*: Discovery and Adventure.
  - *The Chronicles of Narnia: The Lion, the Witch and the Wardrobe*: Adventure and Escapism.

- **Family and Community Ties**
  - *Big Hero 6*: To heal from loss, to fulfill familial expectations.
  - *Encanto*: Harmony.
  - *The Shape of Water*: Connection.
  - *The Golden Compass*: Family Connection.
• **Rebelliousness and Defiance**
  - *Boyhood* (2014): Rebellious
  - *The Sound of Music* (1965): Defiant
I like breaking rules... I live for breaking rules because I think rules are suggestions.

- Rebelliousness and Defiance
  - Boyhood (2014): Rebellious
  - The Sound of Music (1965): Defiant
• Deception and Dishonesty
  • Mrs. Doubtfire (1993): Deceptive
  • Some Like It Hot (1959): Deceptive
I don't think deceiving and being dishonest is bad...

…and it's a little exciting to put on a new persona for someone that you just met, right?

…if I start talking in a British accent to a cashier, how would they know? I've done that before it's so fun.

• Deception and Dishonesty
  • Mrs. Doubtfire (1993): Deceptive
  • Some Like It Hot (1959): Deceptive
List movies that made the deepest impact on you
List movies that made the deepest impact on you

<table>
<thead>
<tr>
<th>Movies</th>
<th>Characteristics</th>
<th>Patterns</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ]</td>
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<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>

Resonated
Low-Fidelity Design
High-Fidelity Design

Protagonist

Select characteristics that resonated with you

- Characteristic
  - Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna.

- Characteristic
  - Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna.

- Characteristic
  - Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna.

- Characteristic
  - Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna.

Patterns

- Pattern
- Pattern
- Pattern
- Pattern

Resonated

- Characteristic
  - Protagonist
  - Movie Name

- Characteristic
  - Protagonist
  - Movie Name

- Characteristic
  - Protagonist
  - Movie Name

Recommendations

- The Matrix
  - When a beautiful stranger leads computer hacker Neo to a forbidding underworld, he discovers the shocking truth: the life he knows is the elaborate deception of an evil cyber-intelligence.

- Kung Fu Panda
  - Po, an overweight, sackcloth-wearing panda, is chosen as the Dragon Warrior and trained by the snakelike Master Shifu to fight his nemesis, the villainous Tai Lung.
Usability Study

Information Overload
Usability Study

Divided Components into Tabs
Usability Study

Not perceived as a selectable list
Usability Study (After)

Intuitive placement
The diagram illustrates a web application architecture using Google Cloud Platform. It consists of a ML Service, which includes components such as Metadata and Pinecone, and an Embeddings service.

The Backend component uses Flask, a lightweight web framework, and is integrated with Google Cloud Platform.

The Frontend includes a Web app built with Flutter, using Dart, and an Android app.
Metadata

Pinecone

Embeddings
Movie Metadata

```
{  
  "title": "WALL·E",
  "director": "Andrew Stanton",
  "actors": [
    "Sigourney Weaver",
  ],
  "characters": [
    "Mary (voice)"
  ],
}
```

Movie Plot:
In the 29th century, Earth is a garbage-strewn wasteland due to an ecocide, caused by rampant consumerism, corporate greed, and environmental ...
## Retrieve Psychological Characteristics

<table>
<thead>
<tr>
<th>Flaws</th>
<th>Beliefs</th>
<th>Desires</th>
<th>Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hoarding</td>
<td>Compassion</td>
<td>Love</td>
<td>Loyal</td>
</tr>
<tr>
<td>Wall-E collects and hoards various objects from Earth without a clear purpose</td>
<td>WALL-E's willingness to help and care for others, even at his own risk</td>
<td>WALL-E's love for EVE is evident in his unwavering devotion and willingness to sacrifice himself for her</td>
<td>WALL-E's unwavering loyalty to his directive to clean up Earth demonstrates his dedication and commitment to his purpose, even when faced with challenges</td>
</tr>
</tbody>
</table>
Create Embeddings

Movie Plot

- Dense Embeddings (768 dimensions)
  - GTE-Base

Psychological Characteristics

- Sparse Embeddings (12 dimensions)
  - GTE-Base + PCA

Pinecone
Hybrid Search

Based on the plot
- Post-apocalyptic
- Robots
- Technological threats
- Dark comedies

Based on the protagonist’s traits
- Resilience
- Purpose
- Freedom
- Loyalty
**Protagonist: Frodo Baggins**

Select characteristics that resonate with you

<table>
<thead>
<tr>
<th>Flaws</th>
<th>Strengths</th>
<th>Desires</th>
<th>Beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>naive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frodo trusts the deceptive Gollum, leading to dangerous situations.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>overwhelmed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frodo struggles with the weight of the Ring and the responsibility it brings.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>stubborn</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frodo insists on going alone to Mordor, risking the success of the mission.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>resentful</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frodo resents the burden of the Ring and the sacrifices he is forced to make.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>self-doubt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frodo doubts his own strength and ability to resist the power of the Ring.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>