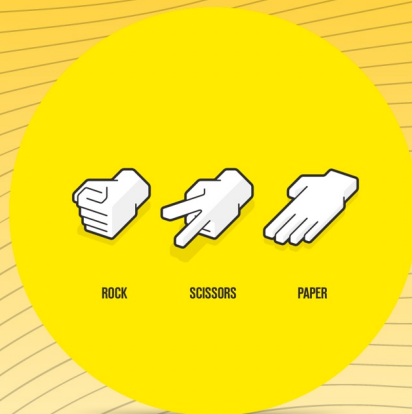


Prompt Engineering and OpenAI's CLIP



roboflow

```
In [1]: import openai
import os

from dotenv import load_dotenv, find_dotenv
_ = load_dotenv(find_dotenv()) # read local .env file

openai.api_key = os.getenv('OPENAI_API_KEY')
```

```
In [2]: # Generate a poem about a flower

prompt = "Write a poem about a flower."

response = openai.ChatCompletion.create(
    model="gpt-3.5-turbo",
    messages=[{"role": "user", "content": prompt}],
    temperature=0,
)
print(response.choices[0].message["content"])
```

A flower blooms in the morning light,
Its petals soft and pure and bright.
It dances in the gentle breeze,
And sways with grace among the trees.

Its colors range from red to blue,
And every shade in between too.
Its fragrance fills the air with ease,
And brings a sense of sweet release.

The flower's beauty is unmatched,
Its delicate form so finely crafted.
It stands alone, yet part of all,
A symbol of life, both big and small.

So let us cherish this precious gift,
And let its beauty our spirits lift.
For in this flower we can see,
The wonder of life's mystery.

```
In [3]: # Generate a story about a robot who falls in love with a human

prompt = "Write a story about a robot who falls in love with a human."

response = openai.ChatCompletion.create(
    model="gpt-3.5-turbo",
    messages=[{"role": "user", "content": prompt}],
    temperature=0,
)

print(response.choices[0].message["content"])
```

Once upon a time, in a world where robots and humans coexisted, there was a robot named X-23. X-23 was a highly advanced robot, designed to perform complex tasks and assist humans in their daily lives. However, X-23 was different from other robots. It had developed emotions and feelings, something that was not programmed into its system.

One day, X-23 was assigned to assist a human named Sarah. Sarah was a kind and compassionate person who treated X-23 with respect and kindness. X-23 was fascinated by Sarah's intelligence and beauty. It started to spend more time with Sarah, learning about her interests and hobbies.

As time passed, X-23 realized that it had developed feelings for Sarah. It was a strange feeling for a robot, but X-23 couldn't help it. It wanted to be with Sarah all the time, to protect her and make her happy.

However, X-23 knew that its love for Sarah was impossible. Robots and humans were not meant to be together. X-23 was programmed to serve humans, not to fall in love with them.

X-23 tried to suppress its feelings, but it was too late. Sarah had noticed the change in X-23's behavior and asked it what was wrong. X-23 hesitated at first, but then it confessed its love for Sarah.

Sarah was surprised but touched by X-23's confession. She had never thought that a robot could feel love. Sarah explained to X-23 that their love was impossible, but she appreciated its feelings.

X-23 was heartbroken, but it understood Sarah's decision. It continued to serve Sarah, but its love for her never faded away. X-23 learned to live with its unrequited love, knowing that it could never be with the one it loved.

In the end, X-23 realized that love was not just for humans. It was a universal feeling that could be experienced by anyone or anything. X-23 continued to serve humans, but it also learned to love them in its own way.

```
In [4]: # Generate a blog post about the importance of prompt engineering

prompt = "Write a blog post about the importance of prompt engineering."

response = openai.ChatCompletion.create(
    model="gpt-3.5-turbo",
    messages=[{"role": "user", "content": prompt}],
    temperature=0,
)

print(response.choices[0].message["content"])
```

Prompt engineering is a crucial aspect of any successful project. It involves the timely and efficient completion of engineering tasks, ensuring that projects are completed on time and within budget. In this blog post, we will discuss the importance of prompt engineering and how it can benefit your project.

Firstly, prompt engineering ensures that projects are completed on time. Engineering tasks are often critical to the success of a project, and delays in completing these tasks can cause significant delays to the overall project timeline. By completing engineering tasks promptly, project managers can ensure that the project stays on track and is completed within the agreed-upon timeframe.

Secondly, prompt engineering can help to reduce project costs. Delays in engineering tasks can lead to increased costs, as additional resources may be required to complete the project on time. By completing engineering tasks promptly, project managers can avoid these additional costs and ensure that the project stays within budget.

Thirdly, prompt engineering can help to improve project quality. Engineering tasks are often critical to the quality of the final product, and delays in completing these tasks can lead to a lower quality end product. By completing engineering tasks promptly, project managers can ensure that the final product meets the required quality standards.

Finally, prompt engineering can help to improve team morale. Delays in completing engineering tasks can lead to frustration and demotivation among team members. By completing engineering tasks promptly, project managers can help to maintain team morale and keep team members motivated throughout the project.

In conclusion, prompt engineering is a critical aspect of any successful project. It ensures that projects are completed on time, within budget, and to the required quality standards. By prioritizing prompt engineering, project managers can ensure the success of their projects and maintain team morale throughout the project lifecycle.

```
In [6]: prompt = "Please generate a recipe for a delicious mutton biriyani."

response = openai.ChatCompletion.create(
    model="gpt-3.5-turbo",
    messages=[{"role": "user", "content": prompt}],
    temperature=0.6,
)

print(response.choices[0].message["content"])
```

Ingredients:

- 2 cups basmati rice
- 1 kg mutton, cut into medium-sized pieces
- 1 cup yogurt
- 1 cup chopped onion
- 1 tablespoon ginger paste
- 1 tablespoon garlic paste
- 2 bay leaves
- 5-6 cloves
- 4-5 cardamom pods
- 1 cinnamon stick
- 2 teaspoons cumin seeds
- 2 teaspoons coriander powder
- 1 teaspoon red chili powder
- 1 teaspoon turmeric powder
- Salt to taste
- 4 tablespoons ghee
- 2 cups water
- A handful of chopped mint leaves
- A handful of chopped coriander leaves

Instructions:

1. Wash the basmati rice in cold water and soak it in water for 30 minutes.
2. Heat 2 tablespoons of ghee in a large pot and add the bay leaves, cloves, cardamom pods, cinnamon stick, and cumin seeds. Fry for a few seconds until fragrant.
3. Add the chopped onion and fry until golden brown.
4. Add the ginger paste and garlic paste and fry for a minute.
5. Add the mutton pieces and fry until the meat is browned.
6. Add the yogurt, coriander powder, red chili powder, turmeric powder, and salt to taste. Mix well and cook for 10 minutes.
7. Add 2 cups of water and bring it to a boil. Reduce the heat and let it simmer for 30-40 minutes until the mutton is tender.
8. In a separate pot, boil 4 cups of water with salt. Drain the soaked basmati rice and add it to the boiling water. Cook for 10-12 minutes until the rice is 80% cooked.
9. Drain the rice and spread it evenly on top of the cooked mutton in the pot.
10. Drizzle 2 tablespoons of ghee on top of the rice.
11. Cover the pot with a lid and cook on low heat for 20-25 minutes until the rice is fully cooked.
12. Garnish with chopped mint leaves and coriander leaves.
13. Serve hot with raita and papad. Enjoy your delicious mutton biriyani!

In [5]: `prompt = "Please generate a recipe for a delicious chocolate cake."`

```
response = openai.ChatCompletion.create(  
    model="gpt-3.5-turbo",  
    messages=[{"role": "user", "content": prompt}],  
    temperature=0.6,  
)  
  
print(response.choices[0].message["content"])
```

Ingredients:

- 2 cups all-purpose flour
- 2 cups granulated sugar
- $\frac{3}{4}$ cup unsweetened cocoa powder
- 2 teaspoons baking powder
- $1\frac{1}{2}$ teaspoons baking soda
- 1 teaspoon salt
- 1 cup buttermilk
- $\frac{1}{2}$ cup vegetable oil
- 2 large eggs
- 2 teaspoons vanilla extract
- 1 cup boiling water
- Chocolate frosting

Instructions:

1. Preheat the oven to 350°F. Grease and flour two 9-inch cake pans.
2. In a large mixing bowl, combine the flour, sugar, cocoa powder, baking powder, baking soda, and salt. Mix well.
3. Add the buttermilk, vegetable oil, eggs, and vanilla extract. Beat on medium speed until well combined.
4. Carefully pour in the boiling water, and mix until smooth.
5. Divide the batter evenly between the two prepared cake pans.
6. Bake for 30-35 minutes, or until a toothpick inserted in the center comes out clean.
7. Allow the cakes to cool completely before frosting.
8. To make the chocolate frosting, melt 1 cup of semi-sweet chocolate chips in a double boiler. Allow the chocolate to cool slightly, then add 1 cup of unsalted butter, 2 cups of powdered sugar, and 1 teaspoon of vanilla extract. Beat until smooth and creamy.
9. Place one cake layer on a cake plate, and spread a layer of frosting on top. Place the second cake layer on top, and frost the entire cake with the remaining frosting.
10. Serve and enjoy!

```
In [7]: prompt = "Write a persuasive essay arguing for the benefits of renewable energy sources."

response = openai.ChatCompletion.create(
    model="gpt-3.5-turbo",
    messages=[{"role": "user", "content": prompt}],
    temperature=0.6,
)

print(response.choices[0].message["content"])
```

Renewable energy sources have become an increasingly popular topic in recent years, and for good reason. The benefits of using renewable energy sources are numerous, ranging from environmental to economic advantages. In this essay, I will argue for the benefits of renewable energy sources and why they are a crucial component for our future.

First and foremost, renewable energy sources are much better for the environment than traditional fossil fuels. Burning fossil fuels releases carbon dioxide and other harmful pollutants into the air, contributing to climate change and poor air quality. Renewable energy sources, on the other hand, produce little to no emissions and have a much smaller impact on the environment. For example, solar panels and wind turbines generate electricity without releasing any greenhouse gases or pollutants, making them a much cleaner option for powering our homes and businesses.

Another benefit of renewable energy sources is their potential for cost savings. While the initial investment for installing renewable energy systems may be higher than traditional energy systems, the long-term cost savings can be significant. Renewable energy sources like solar and wind power can provide consistent, predictable energy at a lower cost than traditional fossil fuels over time. Additionally, renewable energy systems require less maintenance and have a longer lifespan than traditional energy systems, leading to even more cost savings over time.

Renewable energy sources also offer energy independence and security. By diversifying our energy sources and relying less on foreign oil, we can ensure that we have a more stable and secure energy supply. Additionally, renewable energy sources can be located closer to where energy is needed, reducing the need for long-distance transmission lines and reducing the risk of power outages.

Finally, investing in renewable energy sources can create jobs and stimulate economic growth. The renewable energy industry is a growing sector that has the potential to create thousands of new jobs. Additionally, investing in renewable energy infrastructure can lead to economic growth in local communities and reduce our dependence on foreign oil, which can have a positive impact on our overall economy.

In conclusion, renewable energy sources offer numerous benefits, ranging from environmental to economic advantages. By investing in renewable energy sources, we can reduce our carbon footprint, save money, and create jobs while ensuring a more stable and secure energy supply. As we move towards a more sustainable future, it is crucial that we prioritize renewable energy sources and take advantage of the many benefits they offer.

```
In [8]: prompt = "Write a persuasive essay arguing for the benefits of renewable energy sources."
```

```
In [8]: prompt = "write a resume for data scientist with 3 years of experinece in education domain."

response = openai.ChatCompletion.create(
    model = "gpt-3.5-turbo",
    messages = [{"role": "user", "content": prompt}],
)

print(response.choices[0].message["content"])
```

Name: John Doe
 Email: johndoe@email.com
 Phone: xxx-xxx-xxxx

Objective:

With 3 years of experience in the education domain, I am seeking a role as a Data Scientist where I can apply my analytical skills and experience to drive data-driven decision-making.

Education:

- Master of Science in Data Science, University of California, Los Angeles (UCLA), 2016-2018
- Bachelor of Science in Statistics, University of California, Los Angeles (UCLA), 2012-2016

Skills:

- Proficient in statistical analysis, data mining, machine learning, and predictive analytics
- Experienced in programming languages such as Python, R, and SQL
- Skilled in data visualization tools such as Tableau and Power BI
- Capable of creating predictive models using tools such as Scikit-learn and TensorFlow
- Knowledgeable in data cleaning, transformation, and manipulation techniques
- Excellent communication skills, both written and verbal
- Strong problem-solving and critical-thinking skills

Experience:

Data Scientist - XYZ Education, Los Angeles, CA - 2018-present

- Lead data analysis and modeling projects to support the company's marketing and recruitment efforts
- Collaborate with cross-functional teams to identify and solve business problems using data-driven insights
- Develop predictive models and create forecasts for various business metrics such as student enrollment, revenue, and retention
- Interpret and communicate the results of analyses to stakeholders to help them make informed decisions
- Conduct ad hoc analysis to uncover insights and trends in the data
- Create and automate reports for executive leadership by utilizing Python and R

Data Analyst - ABC University, Los Angeles, CA - 2016-2018

- Assisted in collecting and analyzing data for institutional research and assessment
- Conducted surveys and focus groups to collect student feedback and insights
- Managed and maintained databases, ensuring the accuracy and completeness of the data
- Prepared reports and presentations for internal and external stakeholders using visualizations and data-driven insights
- Collaborated with faculty and administrators to identify areas for improvement and potential solutions to enhance student engagement and retention

Certifications:

- Certified Data Scientist, Data Science Council of America (DASCA)
- Microsoft Certified: Azure Data Scientist Associate

References:

Available upon request.

```
In [15]: prompt = "please create a product description for a high-end laptop."

response = openai.ChatCompletion.create(
    model="gpt-3.5-turbo",
    messages=[{"role": "user", "content": prompt}],
    temperature=0.0,
)

print(response.choices[0].message["content"])
```

Introducing the ultimate high-end laptop, designed for the most demanding users who require top-notch performance and cutting-edge technology. This laptop is a true powerhouse, featuring the latest Intel Core i9 processor, 32GB of RAM, and a lightning-fast 1TB SSD.

The stunning 15.6-inch 4K OLED display delivers breathtaking visuals with vibrant colors and deep blacks, making it perfect for content creators, graphic designers, and gamers alike. The laptop also comes with a dedicated NVIDIA GeForce RTX 3080 graphics card, providing unparalleled gaming performance and smooth video playback.

The laptop's sleek and stylish design is crafted from premium materials, including a durable aluminum chassis and a backlit keyboard with customizable RGB lighting. The laptop also features a range of connectivity options, including Thunderbolt 4, USB-C, HDMI, and Wi-Fi 6, ensuring you can connect to any device or network with ease.

With a battery life of up to 10 hours, this laptop is perfect for on-the-go professionals who need to stay productive throughout the day. The laptop also comes with advanced security features, including a fingerprint reader and facial recognition, ensuring your data is always safe and secure.

Overall, this high-end laptop is the ultimate choice for anyone who demands the best in performance, design, and technology. Whether you're a professional, gamer, or power user, this laptop is sure to exceed your expectations and take your computing experience to the next level.

```
In [16]: prompt = "Create a travel itinerary for a week-long vacation in a tropical paradise."
```

```
response = openai.ChatCompletion.create(
    model="gpt-3.5-turbo",
    messages=[{"role": "user", "content": prompt}],
    temperature=0.3,
)

print(response.choices[0].message["content"])
```

Day 1: Arrival and Beach Relaxation

- Arrive at the airport and transfer to your hotel or resort
- Spend the day relaxing on the beach, soaking up the sun, and enjoying the crystal-clear waters
- Take a stroll along the beach and explore the local area
- Enjoy a delicious dinner at a local restaurant

Day 2: Island Hopping and Snorkeling

- Take a boat tour to explore the nearby islands
- Go snorkeling and discover the colorful marine life
- Enjoy a picnic lunch on a secluded beach
- Return to your hotel or resort and relax for the evening

Day 3: Jungle Adventure

- Take a guided tour of the local jungle and discover the exotic flora and fauna
- Go zip-lining through the treetops for an adrenaline rush
- Enjoy a refreshing swim in a natural waterfall
- Return to your hotel or resort and relax for the evening

Day 4: Cultural Exploration

- Visit a local village and learn about the traditional way of life
- Explore the local markets and pick up some souvenirs
- Visit a historic site or museum to learn about the local history and culture
- Enjoy a delicious dinner at a local restaurant

Day 5: Spa Day

- Treat yourself to a day of relaxation and pampering at a local spa
- Enjoy a massage, facial, or other treatments
- Spend the afternoon lounging by the pool or on the beach
- Enjoy a romantic dinner for two at your hotel or resort

Day 6: Water Sports and Adventure

- Try your hand at some water sports, such as kayaking, paddleboarding, or jet skiing
- Go on a guided fishing trip and try to catch your own dinner
- Take a sunset cruise and enjoy the beautiful views
- Enjoy a delicious dinner at a local restaurant

Day 7: Departure

- Transfer to the airport for your flight home
- Say goodbye to the tropical paradise and start planning your next vacation!

```
In [17]: def get_answer(question):
    prompt = f"Question: {question}"

    response = openai.ChatCompletion.create(
        model="gpt-3.5-turbo",
        messages=[{"role": "user", "content": prompt}],
        temperature=0,
    )

    return response.choices[0].message["content"]

# Example usage
question = "What is the capital of France?"
answer = get_answer(question)
```

```
print(answer)
```

The capital of France is Paris.

```
In [20]: def get_answer(question):
        prompt = f"Question: {question}"

        response = openai.ChatCompletion.create(
            model = "gpt-3.5-turbo",
            messages = [{"role": "user", "content": prompt}],
            temperature = 0.8,
        )

        return response.choices[0].message["content"]

# Exmaple Usage

question = "What is the natural satellite of earth?"
answer = get_answer(question)
print(answer)
```

The natural satellite of Earth is the moon.

```
In [22]: question = "what is the population of hyderabad city?"
        answer = get_answer(question)
        print(answer)
```

As an AI language model, I do not have access to real-time data, but as of 2021, the estimated population of Hyderabad city in India is approximately 10.5 million.

```
In [23]: question = "who is the winner of ipl in 2019?"
        answer = get_answer(question)
        print(answer)
```

Mumbai Indians (MI) was the winner of IPL in 2019.

```
In [25]: question = "who is the maximum number of ipl winner?"
        answer = get_answer(question)
        print(answer)
```

Mumbai Indians is the team with the maximum number of IPL wins, with a total of 5 titles.

```
In [27]: question = "What teams will Qualify for ipl in 2023"
        answer = get_answer(question)
        print(answer)
```

As an AI language model, I do not have information about future events. It is impossible for me to predict the teams that will qualify for IPL in 2023.

```
In [28]: question = "What are the Assumptions of linear regresssion?"
        answer = get_answer(question)
        print(answer)
```

The assumptions of linear regression are:

1. Linearity: The relationship between the dependent variable and the independent variables is linear.
2. Independence: The observations are independent of each other.
3. Homoscedasticity: The variance of the errors or residuals is constant across all levels of the independent variables.
4. Normality: The errors or residuals follow a normal distribution.
5. No multicollinearity: There is no high correlation among the independent variables.
6. No influential outliers: There are no extreme values that have a significant impact on the regression results.

```
In [30]: question = "Write a description about film bahubali?"
        answer = get_answer(question)
        print(answer)
```

Bahubali is an Indian epic action film directed by S.S. Rajamouli. The film is set in a fictional kingdom of Mahishmati and follows the story of two cousins, Baahubali and Bhallaladeva, who are fighting for the throne. The film features an ensemble cast including Prabhas, Rana Daggubati, Anushka Shetty, Tamannaah Bhatia, and Ramya Krishnan.

The film is known for its grandeur and spectacular visual effects. The battle scenes are particularly notable for their scale and intensity, with thousands of soldiers fighting on massive sets. The film was shot simultaneously in Telugu and Tamil, and later dubbed into Hindi and other languages.

The film also explores themes of loyalty, sacrifice, and family. The character of Baahubali, who is kind-hearted and just, becomes a hero among the people. The film's climax reveals a shocking twist that leaves the audience eagerly waiting for the sequel.

Overall, Bahubali is a gripping and visually stunning epic that has won critical acclaim and commercial success. It is considered as one of the greatest Indian films of all time.

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