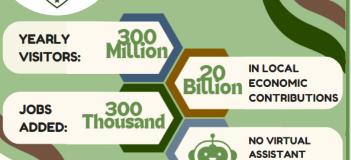
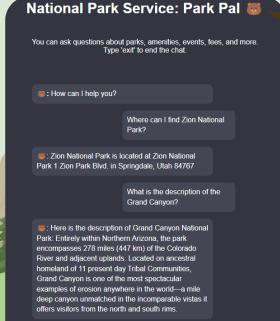






https://github.com/ nblakkanesser/MAD S_Capstone







Midwest National Capital

PROJECT



Synthetic Data

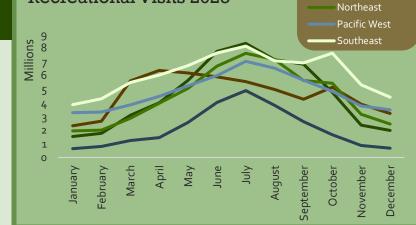
CAPABILTIES

Synthetic queries were developed to represent questions that users may ask in association with five NPS API endpoint.

The team used an 80/20 split to create test & validation data.

Separate queries Queries were developed for evaluating the models to prevent data leakage.

Recreational Visits 2023



Model **Evaluation**

Evaluation methodology

Top 5 National Parks 2023



Fine-Tuned GPT

The NPS API documentation and URL structure did not lend itself to easy interpretation by typical chatbot models. The team explored fine-tuning GPT models to create the parameters for NPS API calls based on a user query.

OPENAI

Fine-tuning improves on few-shot learning by training on many more examples than can fit in the prompt, letting you achieve better results on a wide number of tasks.

SpaCy & NLTK

Studying at ABC

Choose Change Graphic from the options.

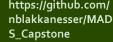
2012

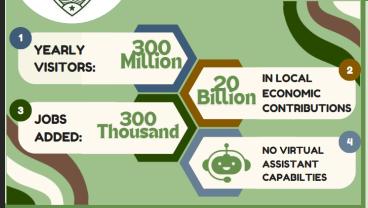
Studying at ABC











National Park Service: Park Pal 🐻 You can ask questions about parks, amenities, events, fees, and more Type 'exit' to end the chat. . How can I help you? Where can I find Zion National : Zion National Park is located at Zion National Park 1 Zion Park Blvd. in Springdale, Utah 84767 What is the description of the **Grand Canyon?** : Here is the description of Grand Canyon National Park: Entirely within Northern Arizona, the park encompasses 278 miles (447 km) of the Colorado River and adjacent uplands. Located on ancestral homeland of 11 present day Tribal Communities, Grand Canyon is one of the most spectacular examples of erosion anywhere in the world-a mile deep canyon unmatched in the incomparable vistas it offers visitors from the north and south rims.



Intermountain

Midwest National Capital

Synthetic Data

Synthetic queries were developed to represent questions that users may ask in association with five NPS API endpoint.

The team used an 80/20 split to create test & validation data.

Separate queries Queries

were developed for evaluating the models to prevent data leakage.

Recreational Visits 2023





Evaluation methodology

Top 5 National Parks 2023

PROJECT

FINE-TUNE GPT

HOST PARK PAL

aws

COMPUTE WITH LAMBDA

ROADMA

PREPARE SYNTHETIC

DATA 🚄



VISITS (MILLIONS)

0

Fine Tuned GPT

The NPS API documentation and URL structure did not lend itself to easy interpretation by typical chatbot models. The team explored fine-tuning GPT models to create the parameters for NPS API calls based on a user query.

15

OPENAI

Fine-tuning improves on few-shot learning by training on many more examples than can fit in the prompt, letting you achieve better results on a wide number of tasks.

SpaCy & NLTK

Studying at ABC

Choose Change Graphic from the options.

2012

Studying at ABC







https://github.com/ nblakkanesser/MAD S_Capstone



National Park Service: Park Pal 🐻 You can ask questions about parks, amenities, events, fees, and more Type 'exit' to end the chat. . How can I help you? Where can I find Zion National : Zion National Park is located at Zion National Park 1 Zion Park Blvd. in Springdale, Utah 84767 What is the description of the **Grand Canyon?** : Here is the description of Grand Canyon National Park: Entirely within Northern Arizona, the park encompasses 278 miles (447 km) of the Colorado River and adjacent uplands. Located on ancestral homeland of 11 present day Tribal Communities, Grand Canyon is one of the most spectacular examples of erosion anywhere in the world-a mile deep canyon unmatched in the incomparable vistas it offers visitors from the north and south rims.

Intermountain

Midwest
National Capital

PROJECT DADMAP



LAMBDA

Synthetic Data

Synthetic queries were developed to represent questions that users may ask in association with five NPS API endpoint.

The team used an 80/20 split to create test & validation data. Separate queries

were developed for evaluating the models to prevent data leakage.

Model **Evaluation**

Evaluation methodology

Recreational Visits 2023



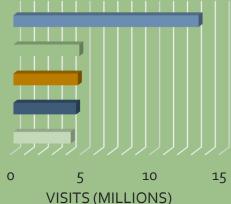
Top 5 National Parks 2023



STORE WITH S3

Yellowstone

Rocky Mountain



Fine Tuned GPT

The NPS API documentation and URL structure did not lend itself to easy interpretation by typical chatbot models. The team explored fine-tuning GPT models to create the parameters for NPS API calls based on a user query.

66

OPENAI

Fine-tuning improves on few-shot learning by training on many more examples than can fit in the prompt, letting you achieve better results on a wide number of tasks.

SpaCy & NLTK

2012

Studying at ABC

Choose Change Graphic from the options.

2012

Studying at ABC







https://github.com/ nblakkanesser/MAD **S_Capstone**





Intermountain

Synthetic Data

Synthetic queries were developed to represent questions that users may ask n association with five NPS API endpoint.

The team used an 80/20 split to create test & validation data. Separate queries Queri

were developed for evaluating the

82k Queries

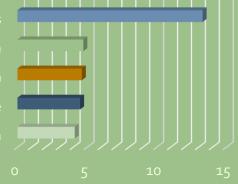
Model **Evaluation**

Evaluation methodology

models to prevent data leakage.



Top 5 National Parks 2023



VISITS (MILLIONS)

Fine Tuned GPT

The NPS API documentation and URL structure did not lend itself to easy interpretation by typical chatbot models. The team explored fine-tuning GPT models to create the parameters for NPS API calls based on a user query.

OPENAI

Fine-tuning improves on few-shot learning by training on many more examples than can fit in the prompt, letting you achieve better results on a wide number of tasks.

SpaCy & NLTK

Studying at ABC

Choose Change Graphic from the options.

2012

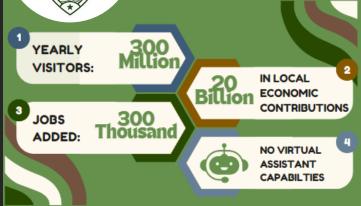
Studying at ABC







nblakkanesser/MAD S_Capstone





Chat with Park Pal Today!



Intermountain

National Capital

Midwest

Synthetic Data **PROJECT**

Synthetic queries were developed to represent questions that users may ask in association with five NPS API endpoint.

The team used an 80/20 split to create test & validation data. Separate queries **Queri**

were developed for evaluating the models to prevent data leakage.

Fine Tuned GPT

The NPS API documentation and URL structure did not lend itself to easy interpretation by typical chatbot models. The team explored fine-tuning GPT models to create the parameters for NPS API calls based on a user query.

OPENAL

Fine-tuning improves on few-shot learning by training on many more examples than can fit in the prompt, letting you achieve better results on a wide number of tasks

Recreational Visits 2023



Model **Evaluation**

ROADM

PREPARE SYNTHETIC

DATA

NLTK & SPACY

FINE-TUNE GPT

HOST PARK PAL

STORE WITH S3

aws

COMPUTE WITH

LAMBDA

Evaluation methodology

SpaCy & NLTK

2012 Studying at ABC

Choose Change Graphic from the options.

Top 5 National Parks 2023









nblakkanesser/MAD S_Capstone





Chat with Park Pal Today!



Synthetic Data

Synthetic queries were developed to represent questions that users may ask in association with five NPS API endpoint.

The team used an 80/20 split to create test & validation data. Separate queries **Queri**

were developed for evaluating the models to prevent data leakage.

Fine Tuned GPT

The NPS API documentation and URL structure did not lend itself to easy interpretation by typical chatbot models. The team explored fine-tuning GPT models to create the parameters for NPS API calls based on a user query.

OPENAL

Fine-tuning improves on few-shot learning by training on many more examples than can fit in the prompt, letting you achieve better results on a wide number of tasks

SpaCy & NLTK

Recreational Visits 2023

98

Millions

Midwest National Capital

Intermountain

Northeast Pacific West

Southeast

Top 5 National Parks 2023



VISITS (MILLIONS)

Model **Evaluation**

PROJECT

ROADM

PREPARE SYNTHETIC

DATA

NLTK & SPACY

FINE-TUNE GPT

HOST PARK PAL

STORE WITH S3

aws

COMPUTE WITH

LAMBDA

Evaluation methodology

2012 Studying at ABC





GitHub:

https://github.com/

nblakkanesser/MAD

Chat with

Park Pal

Today!

Intermountain

National Capital

Midwest

Northeast

S Capstone







PROJECT

Synthetic Data

Synthetic queries were developed to represent questions that users may ask in association with five NPS API endpoint.

The team used an 80/20 split to create test & validation data.
Separate queries

Separate queries **Queries** were developed for evaluating the models to prevent data leakage.

Fine Tuned GPT

The NPS API documentation and URL structure did not lend itself to easy interpretation by typical chatbot models. The team explored fine-tuning GPT models to create the parameters for NPS API calls based on a user query.

66 -

OPENAI

Fine-tuning improves on few-shot learning by training on many more examples than can fit in the prompt, letting you achieve better results on a wide number of tasks.

Recreational Visits 2023



Model **Evaluation**

Evaluation methodology

SpaCy & NLTK

2012 Studying at ABC

Choose Change Graphic from the options.

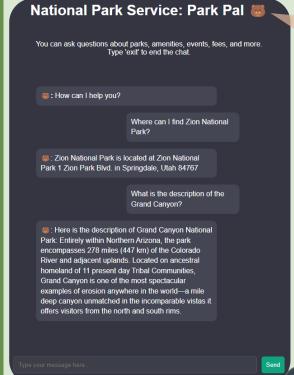
Top 5 National Parks 2023











Chat with Park Pal Today!





https://github.com/ nblakkanesser/MAD S_Capstone

Intermountain

National Capital

Midwest

Northeast

Southeast

Pacific West

ROADMAP



Synthetic Data

Synthetic queries were developed to represent questions that users may ask in association with five NPS API endpoint.

The team used an 80/20 split to create test & validation data. Separate queries

Separate queries Queries were developed for evaluating the models to prevent data leakage.

Fine Tuned GPT

The NPS API documentation and URL structure did not lend itself to easy interpretation by typical chatbot models. The team explored fine-tuning GPT models to create the parameters for NPS API calls based on a user query.

OPENAI

Fine-tuning improves on few-shot learning by training on many more examples than can fit in the prompt, letting you achieve better results on a wide number of tasks.

Recreational Visits 2023

October ovember

Model **Evaluation**

STORE WITH S3

LAMBDA

Evaluation methodology

SpaCy & NLTK

2012 Studying at ABC

Choose Change Graphic from the options.

Top 5 National Parks 2023

