# Image GPT

## **Overview**

The "Image GPT" project integrates advanced Natural Language Processing (NLP) with machine learning techniques for satellite image analysis. It enables users to interact with the system using natural language queries for tasks such as windmill detection from satellite images. The project aims to enhance AI functionality and accessibility through seamless NLP integration.

## **Features**

* Scene classification
* Object detection
* Image captioning
* Edge detection

## **Methodology**

* Developed and fine-tuned a state-of-the-art NLP module Gemini AI for domain-specific vocabulary and context.
* Collected and annotated a diverse dataset of text queries related to satellite imagery tasks.
* Conducted a literature survey to inform project methodologies.

## **Future Directions**

* Expand the dataset with satellite imagery for enhanced model reliability.
* Optimize algorithms for faster processing.
* Refine user interface for improved usability.

## **Results**

Initial results with Gemini AI demonstrate high accuracy in satellite image analysis, promising real-time monitoring across environmental conditions.