

KGiSL Institute Of Technology NAAN MUDHALVAN

Project Title:

Image Recognition with IBM Cloud Visual Recognition

Team Members:

- 1.Chandini.D
- 2.Arthi.R
- 3.Sophia.S
- 4.Hemalatha.K

Problem Statement:

Develop an image recognition system using IBM Cloud Visual Recognition. Share your passion for photography by uploading images and watch as the system accurately classifies and describes their contents. Craft engaging visual stories with the help of AI-generated captions. Connect with your audience through captivating visuals and compelling narratives

Problem Definition:

The project involves creating an image recognition system using IBM Cloud Visual Recognition. The goal is to develop a platform where users can upload images, and the system accurately classifies and describes the image contents. This will

enable users to craft engaging visual stories with the help of AIgenerated captions, enhancing their connection with the audience through captivating visuals and compelling narratives.

Problem Description:

Creating an image recognition system using IBM Cloud Visual Recognition can be an exciting project. It allows you to harness the power of AI to classify and describe the contents of images, opening up various creative possibilities. Here's a step-by-step guide to developing such a system:

1. Create an IBM Cloud Visual Recognition Service:

- Log in to your IBM Cloud account and navigate to the IBM Cloud dashboard.
- Create a new instance of the IBM Cloud Visual Recognition service.

2. Collect and Prepare Data:

- Gather a diverse dataset of images that you want to use for training and testing.
- Organize the images into different categories or classes, ensuring each class is well-represented.

3.Training the Model:

- Upload your dataset to the IBM Cloud Visual Recognition service.

- Train your custom model using the uploaded images.
- Fine-tune the model if necessary to improve accuracy.

4. Integration:

- Integrate the trained model into your application or website. You can use the IBM Cloud Visual Recognition API to make predictions.

5. User Interface Development:

- Create a user-friendly interface for users to upload images.
- Implement a mechanism to send the uploaded images to your IBM Cloud Visual Recognition service for analysis.

.6 Image Analysis:

- When a user uploads an image, send it to the IBM Cloud Visual Recognition service for analysis.
- Retrieve the classification results and image descriptions generated by the service.

7. Generating Captions:

- Use the AI-generated image descriptions to automatically generate captions for the images.
- You can use natural language generation (NLG) techniques or pre-trained language models for this purpose.

8. Displaying Results:

- Display the classified categories and generated captions alongside the uploaded images.
 - Make the results visually appealing and easy to understand.

9. Testing and Validation:

- Thoroughly test your image recognition system with various images to ensure accuracy.
 - Collect user feedback and make improvements based on their input.

10. Accessibility and Scalability:

- Ensure that your system is accessible to a wide range of users, including those with disabilities.
- Plan for scalability to handle increased traffic as your application gains popularity.

11. Deployment:

- Deploy your image recognition system on a web server or a cloud platform for public access.

12. Marketing and User Engagement:

- Promote your image recognition platform to photography enthusiasts, bloggers, and social media influencers.
- Encourage users to share their AI-generated captions and visuals on social media platforms.

13. Maintenance and Updates:

- Regularly update the model with new data to improve accuracy.
- Monitor system performance and address any issues promptly.
- Keep up with advancements in AI and image recognition to incorporate new features and improvements.