

IMAGE CAPTION GENERATOR

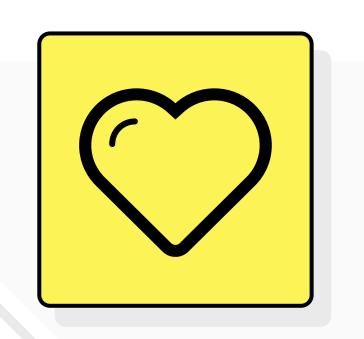
This project is an implementation of an image caption generator using deep learning techniques. The model takes an input image and generates a descriptive caption that describes the content of the image. The project utilizes convolutional neural networks (CNNs) for image feature extraction and recurrent neural networks (RNNs) for language modeling.

G.L. Yasaswini 21BEC7008 G. Veda Pranav 21BCE8931 T Kankshith 21BCE8879



GOALS

- Enhance accessibility and understanding of visual content for a wide range of users.
- Improve content engagement and inclusivity, benefiting both creators and consumers.
- Advance the state of the art in image captioning technology for practical and real-world applications.
- Identify and capitalize on business opportunities and market growth related to image caption generation.



WHO are we empathizing with?

- People with visual impairments
- Content creators
- Al researchers and developers

3

What do they HEAR?

 The image captions for the photo describes everything so vividly!



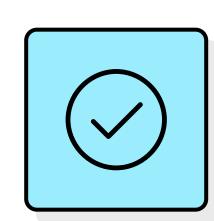
What do they HEAR?

- It's making my posts more popular!
- Adding image caption generation has improved our content.



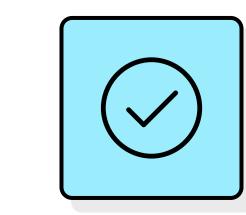
What do they HEAR?

Image caption generation is booming in e-commerce



What do they DO?

 Uses the image caption detector app regularly to access information about their surroundings.



What do they DO?

 Appreciates the app's speed and accuracy in recognizing and describing objects.

What do they THINK and

FEEL?

SEO: It can improve Search

by generating descriptive alt

text for images on websites.

trained on, the better it gets

at generating accurate and

Automation: It can automate

captions for large numbers

of images, saving time and

descriptions for diagrams,

Continuous Learning: The

more data the model is

relevant captions.

the task of generating

Education: It can aid in

learning by providing

figures, and images in

materials.

textbooks or e-learning

Engine Optimization (SEO)

PAINS

Inaccurate Results: If the

image caption generator

Support: Users might be

dissatisfied if the tool only

security of their images or

Legal or Ethical Concerns:

Users may have concerns

about copyright issues or

personal data may be a

significant pain point.

the ethical use of Al

supports a limited set of

frequently provides

captions, it can be

frustrating for users.

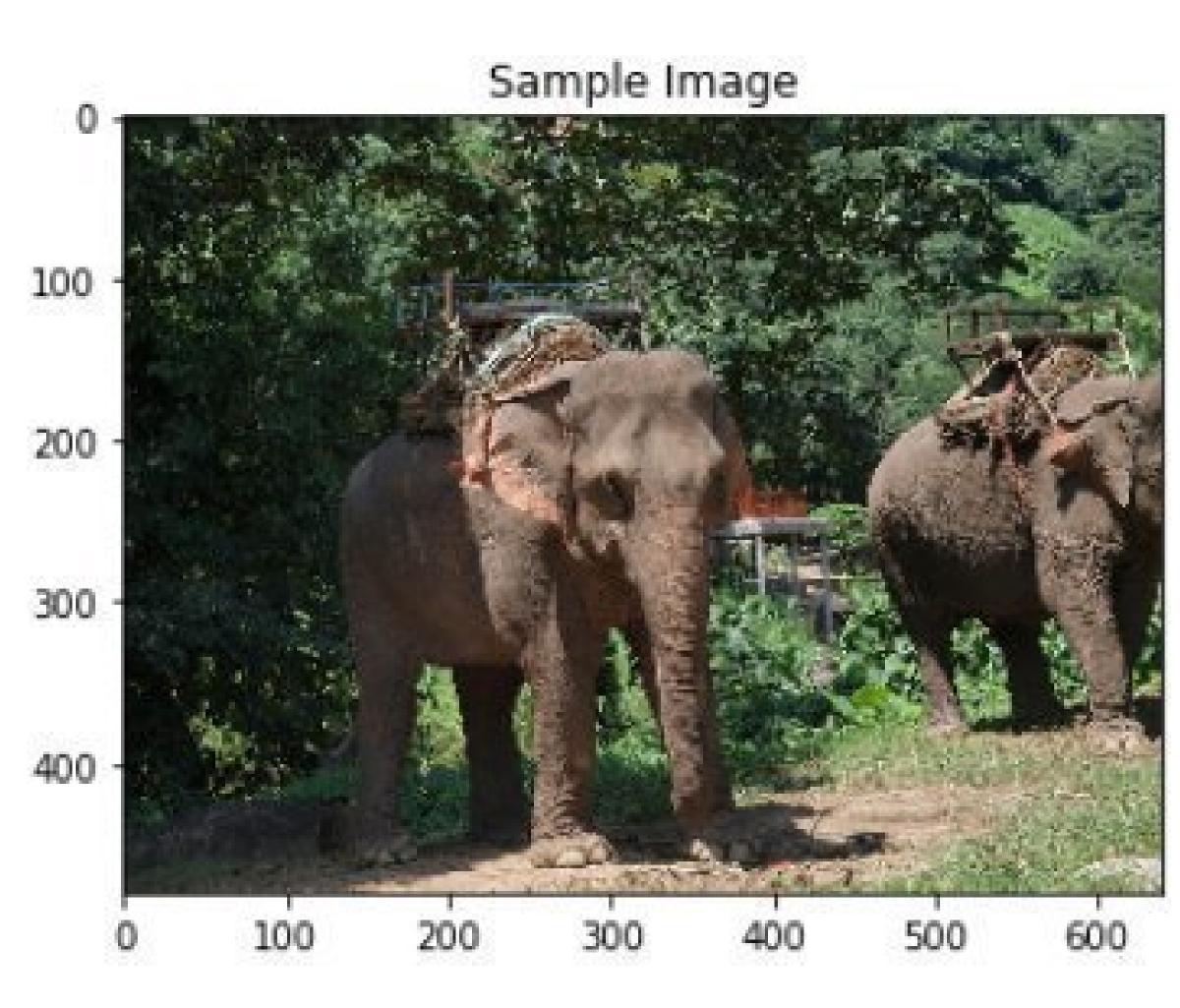
Limited Language

Privacy Concerns:

Concerns about the

languages.

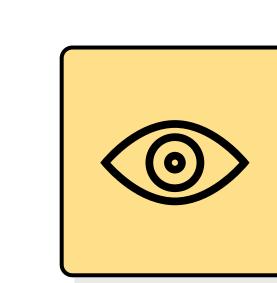
incorrect or irrelevant



A group of elephants walking across a dirt road .

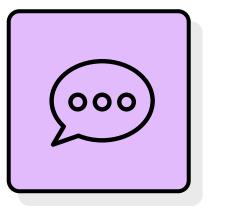
What do they need to DO?

- Users of Image Captions: Interact with and use the generated captions to understand image content.
- Content Creators: Integrate image captioning tools into their content and possibly review/edit generated
- Al Researchers and Developers: Continuously improve image captioning models through research, development, and testing.
- Stakeholders and Industry Observers: Assess market trends and stay informed about the impact and opportunities of image caption generation.



What do they SEE?

- Users with visual impairments can understand the
- content of images on digital platforms.
- Users can get automatic captions for images on social media platforms, adding context to the images.
- Students can get automatic descriptions for diagrams, figures, and images in textbooks or e-learning materials.
- Web developers can improve the accessibility of their websites by providing descriptive alt text for images.

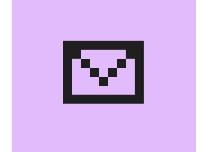


What do they SAY?

 "I need an app that can describe images for me."

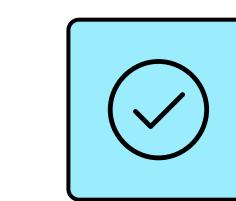


should work quickly and accurately."



what's in the photos, especially when I can't see them."

"I want to understand



What do they DO?

 Relies on the app to improve thei daily life, from reading menus to identifying landmarks.

