

BLIP Custom Nodes for ComfyUI

This repository contains custom nodes for integrating BLIP (Bootstrapped Language-Image Pretraining) into ComfyUI for advanced image-based question answering and text generation.

Features

- **BlipProcessorNode**: Processes an input image and answers up to 10 questions about it.
- **ListToTextNode**: Converts a list of strings into a single string, useful for formatting outputs.
- **Integration with Show Text Node**: Uses a custom script to display the results in ComfyUI.

Installation

Step 1: Clone the my Repository

Clone this repository into the `custom_nodes` directory of your ComfyUI installation:

```
cd path/to/ComfyUI/custom_nodes
git clone git@github.com:muhammederem/blip-comyui.git
```

Step 2: Install Additional Nodes (Optional)

To enhance functionality, you can also install the `ComfyUI-Custom-Scripts` repository, which includes the `ShowTextNode` for displaying outputs:

```
cd path/to/ComfyUI/custom_nodes
git clone https://github.com/pythongosssss/ComfyUI-Custom-Scripts.git
```

This script is optional but recommended for displaying question-answer outputs in a user-friendly format.

Step 3: Restart ComfyUI

After cloning the repositories, restart ComfyUI to load the new nodes.

How to Add Custom Nodes and Integrate

1. Ensure the cloned repositories are inside the `custom_nodes` folder of your ComfyUI installation.
2. Open ComfyUI and check the `Blip` category in the node menu. You should see the following nodes:
 - `BlipProcessorNode`
 - `ListToTextNode`

3. Drag and drop the nodes into your workflow as needed.

How to Use the Blip Nodes

BlipProcessorNode

Inputs:

- Image: Provide an input image (from an IMAGE node).
- Question: Specify a mandatory question (default: “What is in the image?”).
- Optional Questions: Add up to 9 additional questions (optional).

Outputs:

A list of answers to the questions asked about the image.

Example Workflow:

- Add an IMAGE node and load your image.
- Add a BlipProcessorNode and connect it to the IMAGE node.
- Enter your questions in the node’s input fields.
- Connect the output of BlipProcessorNode to a ListToTextNode or ShowText for viewing results.

ListToTextNode

Inputs: * A list of strings (e.g., the answers from the BlipProcessorNode).

Outputs: * A single text string, useful for further text-based workflows.

ShowText (Optional)

- Use the ShowText from the ComfyUI-Custom-Scripts repository to display the answers visually in the ComfyUI interface.

How to Run the Workflow

1. Launch ComfyUI by running:

```
python main.py
```

2. Create a new workflow or open an existing one.
 - Add image loader node and connect it to the BlipProcessorNode.
 - Add ListToTextNode connect with BlipProcessorNode and ShowText with ListToTextNode nodes to view the results.
3. Configure your questions in the BlipProcessorNode.
4. Run the workflow and view the outputs.