

Initial Setup: Data Collection in Google Colab

Hand Gesture Detection Project

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1 Initial Configuration

1.1 Prerequisites

Before proceeding, ensure you have:

- 1. A Google Account
- 2. Access to Google Drive
- 3. Access to Google Colab

1.2 Project Structure

The project is organized according to the following structure:

```

your_personal_folder/
  google_colab/
    data/                # Directory for storing collected images
      doro/
      fergus/
      natalia/
      sergio/
    src/                 # Data collection notebooks
      collect_images_doro.ipynb
      collect_images_fergus.ipynb
      collect_images_natalia.ipynb
      collect_images_sergio.ipynb

```

2 Setup Procedure

2.1 1. Google Drive Preparation

1. Access [Google Drive](#)
2. Create a new project directory (e.g., “GestureProject”)
3. Note the complete path to this directory for future reference

2.2 2. Environment Configuration

1. Access [Google Colab](#)
2. Download and open the `clone_gc_repo.ipynb` notebook
3. Connect the notebook to Google Drive:
 - Click “Mount Drive” when prompted
 - Authorize access when requested

2.3 3. Working Directory Configuration

In the `clone_gc_repo.ipynb` notebook, modify the `DESTINO_DRIVE` variable with your directory path:

```

# Ejemplo: Si creaste la carpeta "ProyectoGestos"
DESTINO_DRIVE = '/content/drive/MyDrive/ProyectoGestos'
!mkdir -p "{DESTINO_DRIVE}"

```

2.4 4. Data Collection Setup

1. Navigate to the `src` directory in your Google Drive
2. Open your designated notebook (e.g., `collect_images_sergio.ipynb`)
3. Update the environment variable in the notebook:

```

# Usa la misma ruta que definiste en DESTINO_DRIVE
YOUR_LOCAL_FOLDER = '/content/drive/MyDrive/ProyectoGestos'

```

```
subrepo_name = 'google_colab'
project_path = os.path.join(YOUR_LOCAL_FOLDER, subrepo_name)

# Establecer carpeta de trabajo
os.chdir(project_path)
```

3 Installation Verification

To ensure proper configuration:

1. Verify that the directory structure matches the provided template
2. Confirm access to your personal notebook in the **src** directory
3. Validate the existence of your designated **data** subdirectory

4 Common Issues and Solutions

- **Drive Permission Error:** Ensure proper Drive mounting
- **Directory Visibility Issues:** Refresh Google Drive page
- **Path Error:** Verify exact path correspondence with Drive structure

5 Next Steps

Upon successful configuration:

1. Execute your personal notebook
2. Initiate image collection process
3. Verify proper image storage in your designated **data/** subdirectory