# Installation Guidelines

## Overview

This document provides detailed steps to install and set up the Skin Disease Diagnosis web application. Follow the instructions to ensure a seamless setup.

### Prerequisites

#### 1. System Requirements

1. **Operating System**: Windows, macOS, or Linux
2. **Python Version**: 3.8 or above
3. **RAM**: Minimum 8GB (16GB recommended for training models)
4. **Disk Space**: At least 5GB of free space

#### 2. Software Dependencies

1. **Python libraries:** 
   1. TensorFlow 2.15.0
   2. Flask
   3. NumPy
   4. Pillow
   5. Scikit-learn

## Installation Steps

### Step 1: Clone the Repository

1. Open your terminal and run the following command to clone the repository:

git clone https://github.com/yourusername/SkinDiseaseDetection-Nepal-ML-CNN.git

1. Navigate to the project folder:

cd SkinDiseaseDetection-Nepal-ML-CNN/src/final\_code

### Step 2: Set Up a Virtual Environment

1. Create a virtual environment:

python -m venv tf\_env

1. Activate the virtual environment:
   * 1. **Linux/Mac**:

source tf\_env/bin/activate

* + 1. **Windows**:

.\tf\_env\Scripts\activate

### Step 3: Install Dependencies

* Install the required Python libraries:

pip install tensorflow==2.15.0 flask numpy pillow scikit-learn

### Step 4: Start the Application

1. Run the application:

Python Source\_code/skin\_disease\_prediction\_app.py

1. You will see a message similar to:

Running on http://127.0.0.1:5001/ (Press CTRL+C to quit)

### Step 5: Access the Application

Open a web browser and navigate to http://127.0.0.1:5001 to use the application.

## Optional: GPU Support

* If you wish to utilize GPU for TensorFlow, ensure you have:
  + NVIDIA GPU with CUDA Compute Capability 3.5 or higher
  + Installed CUDA Toolkit and cuDNN compatible with TensorFlow 2.15.0

## Troubleshooting

### Common Issues

1. Module Not Found:
   1. Ensure all dependencies are installed correctly using:

pip list

1. Python Version Compatibility:
   1. Verify the Python version:

python –version

* 1. Upgrade Pip version if necessary.

pip install --upgrade pip

1. Application Not Starting:

Check for errors in the terminal logs and resolve any missing configurations.