



I need a desktop APP which takes handwritten digits from user as input, and recognizes the digit using a multinomial logit model. Show me the code.



Xi Li

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27/03/2025, 19:10:08



GPT-4o (Tokens used 878)

Sure, I can provide you with a simple Python example using the Tkinter library for the GUI part and Scikit-learn for the machine learning model. We'll use the MNIST dataset for training the multinomial logistic regression model.

First, you'll need to install the necessary libraries if you haven't already:

```
pip install numpy scikit-learn matplotlib pillow
```

Here is the code to create a simple desktop application:





```
import tkinter as tk
from tkinter import *
import numpy as np
```

AttributeError: module 'numpy' has no attribute 'int'.

`np.int` was a deprecated alias for the builtin `int`. To avoid this error in existing code, use `int` by itself. Doing this will not modify any behavior and is safe. When replacing `np.int`, you may wish to use e.g. `np.int64` or `np.int32` to specify the precision. If you wish to review your current use, check the release note link for additional information.

The aliases was originally deprecated in NumPy 1.20; for more details and guidance see the original release note at:


<https://numpy.org/devdocs/release/1.20.0-notes.html#deprecations>



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GPT-4o (Tokens used 1644)

It looks like you're encountering an issue due to the deprecation of `np.int` in NumPy. You can resolve this issue by replacing `np.int` with `int`. Here's the updated code:

```
import tkinter as tk
from tkinter import *
import numpy as np
from PIL import Image, ImageDraw
```

It works now!