

[1] Tool: ChatGPT

Prompt: Please write a Python code snippet to convert my flattened images back to their original dimensions for input into an ANN or CNN.

Output:

Since your images are grayscale and 128×128 , each one only has 1 channel (not 3 like RGB).

So your flattened images probably have shape (N, 16384) because $128 \times 128 = 16384$.

Here's the exact code snippet to convert them back to the proper CNN input shape:

✂ Code Snippet (for grayscale 128×128)

```
import numpy as np
```

```
# Example: flattened images array of shape (num_samples, 128*128)
```

```
# For example, (N, 16384)
```

```
flattened_images = np.load("flattened_images.npy") # or use your variable
```

```
print("Before reshape:", flattened_images.shape)
```

```
# Reshape back to (num_samples, height, width, channels)
```

```
images_resaped = flattened_images.reshape(-1, 128, 128, 1)
```

```
print("After reshape:", images_resaped.shape)
```