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4. Another Clustering Example: Image Quantization

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Exercises due Apr 19, 2023 08:59 -03 Completed


Another Clustering Example: Image Quantization




Video

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Clustering in Image Quantization

1/1 point (graded)

In the video above, Professor Barzilay described how we can cluster colors into similar image with the "representative" colors of each cluster.

As shown in the lecture, the image below is the original image.



2



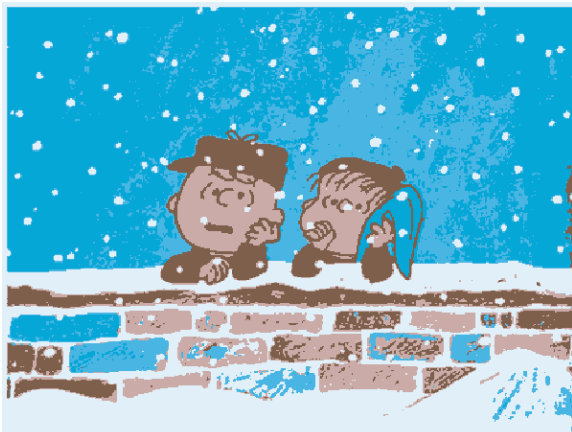
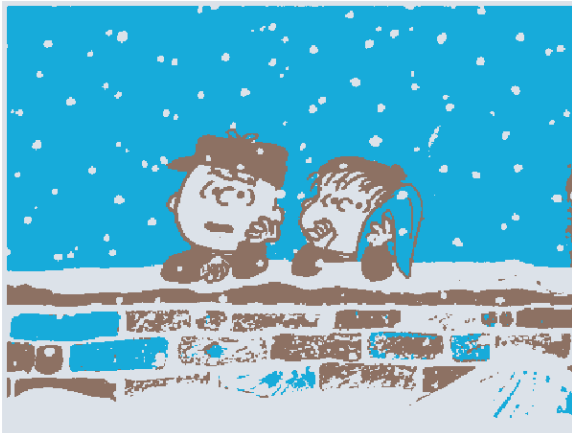
Submit

You have used 1 of 2 attempts

Clustering in Image Quantization

1/1 point (graded)

If we use _____, which of the following will be the compressed image?



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You have used 1 of 2 attempts

Discussion

Topic: Unit 4. Unsupervised Learning (2 weeks) :Lecture 13. Clustering 1 / 4. Another Clustering Example: Image Quantization

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✓ Trying to understand how the formula is derived in the whiteboard?

It shows $1024 \times 1024 \times 5 + 32 \times 24$. So what does 5, 32, and 24 represent? And what is this whole equation trying to do?

💬 Unclear on what we are doing especially regarding the formula here and the K

Hi all, while I guessed using my eye sight, what the K here represented, I am confused what the formula means.

💬 The math that leads to 3M at 1m 12s?

So the chalkboard at 1m 12s reads: $1024 \times 1024 \times 24 \sim 3M$. When I try to solve this on a calculator, I get $\sim 25.8M$.

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