

MLP Model:

- Performed decently on frog, horse, and truck (recall-heavy).
- Poor feature extraction due to lack of convolutional layers; heavily underfits visual tasks.

CNN Model (Best Performer):

- Strong across all classes, especially automobile, ship, and truck.
- cat and dog have lower performance — likely due to inter-class similarity.

Transfer Learning (MobileNetV2):

- Slight improvement over MLP; frog, deer, and truck do relatively okay.
- Pretrained model not fully leveraged — probably due to:

Frozen layers

Small input resolution (32×32)

No fine-tuning

Conclusion: CNNs outperform MLPs for image data. Transfer learning provides additional boost in performance and efficiency.