

When to Use Which Normalization?



Large Batch CNNs

Training CNNs with large batch sizes



Batch Normalization



Transformers / RNNs

Sequential models, language tasks



Layer Normalization



Style Transfer

Artistic tasks, style manipulation



Small Batch Detection

Object detection, segmentation



Instance Normalization

Group Normalization



GANs

Discriminator stability in GANs



Spectral Normalization



Online Learning

Single sample or streaming data



Layer / Group Norm



Key Considerations



Batch Size
Constraints



Computational
Cost



Architecture
Type



Task
Requirements