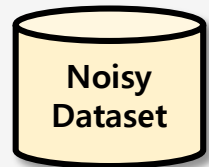
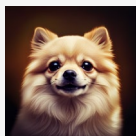


$$(X, \tilde{Y}) \sim$$



$$w = [w_1, w_2, w_3]$$



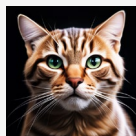
Class :

■	□	□
■	□	□

Label :

■	□	□
■	□	□

$w_1 \uparrow$



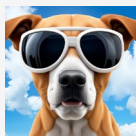
Class :

□	■	□
□	■	□

Label :

■	□	□
■	□	□

$w_2 \downarrow$



Class :

□	□	■
□	□	■

Label :

□	□	■
□	□	■

$w_3 \downarrow$

“Re-weight from T ”
(Existing method)

Dirichlet based per-sample Weighting Sampling (DWS)

$$\alpha^{(1)} \rightarrow \infty$$

$w^{(1)}$ from $Dir(\alpha^{(1)}\mu)$

$$\mu = [0.7, 0.2, 0.1]$$

$$\alpha^{(2)} \rightarrow 0$$

$w^{(2)}$ from $Dir(\alpha^{(2)}\mu)$

[Class] =

■	□	□
■	□	□

[Label] =

□	□	■
□	□	■

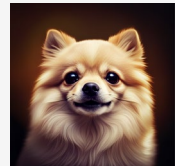


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[Label] =

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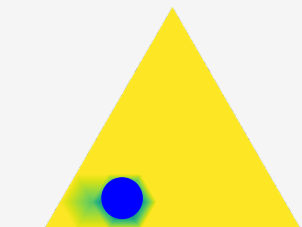
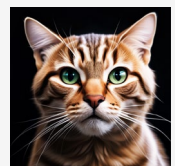


[Class] =

□	■	□
□	■	□

[Label] =

■	□	□
■	□	□



$$w^{(1)} = [0.7, 0.2, 0.1]$$

$$R(w^{(1)}) = \frac{1}{3} (0.7 \text{ [Pomeranian]} + 0.2 \text{ [Cat]} + 0.1 \text{ [Dog with sunglasses]})$$

[Class] =

■	□	□
■	□	□

[Label] =

□	□	■
□	□	■

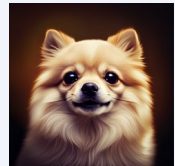


[Class] =

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[Label] =

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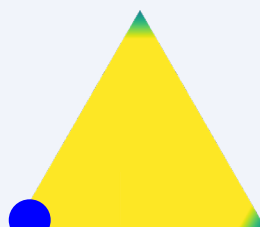
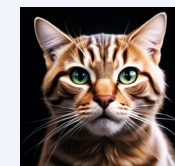


[Class] =

□	■	□
□	■	□

[Label] =

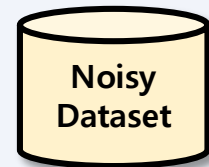
■	□	□
■	□	□



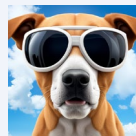
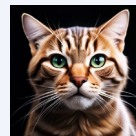
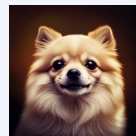
$$w^{(2)} = [1.0, 0.0, 0.0]$$

$$R(w^{(2)}) = \frac{1}{3} (1.0 \text{ [Pomeranian]} + 0.0 \text{ [Cat]} + 0.0 \text{ [Dog with sunglasses]})$$

$$(X, \tilde{Y}) \sim$$



$$w = [1, 0, 0]$$



Refined Dataset

“Re-sample from T ”
(RENT)