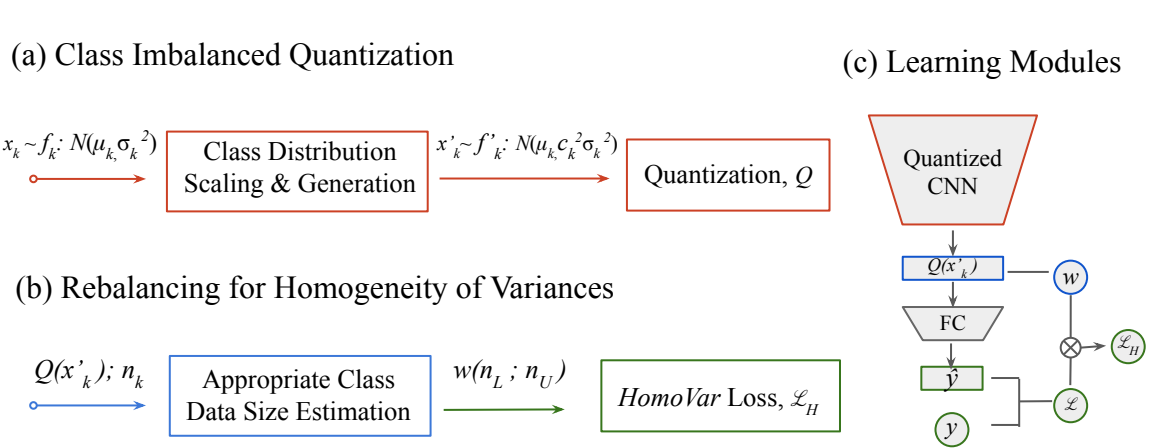
(a) Class Imbalanced Quantization
$x_k \sim f_k: N(\mu_k, \sigma_k^2)$
Class Distribution Scaling & Generation
$x'_k \sim f'_k: N(\mu_k, c_k^2 \sigma_k^2)$
Quantization, Q
(b) Rebalancing for Homogeneity of Variances
$Q(x'_k); n_k$
Appropriate Class Data Size Estimation
$w(n_L ; n_U)$
HomoVar Loss, $\mathcal{L}_H$
(c) Learning Modules
Quantized CNN
$Q(x'_k)$
FC
$\hat{y}$
y
w
$\mathcal{L}_H$
$\mathcal{L}$