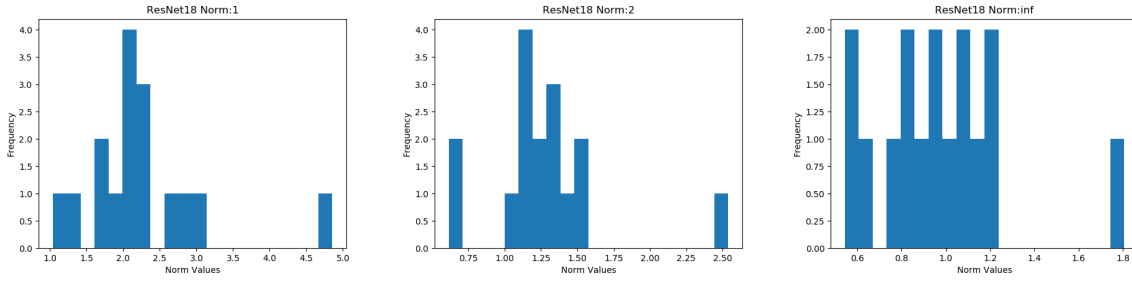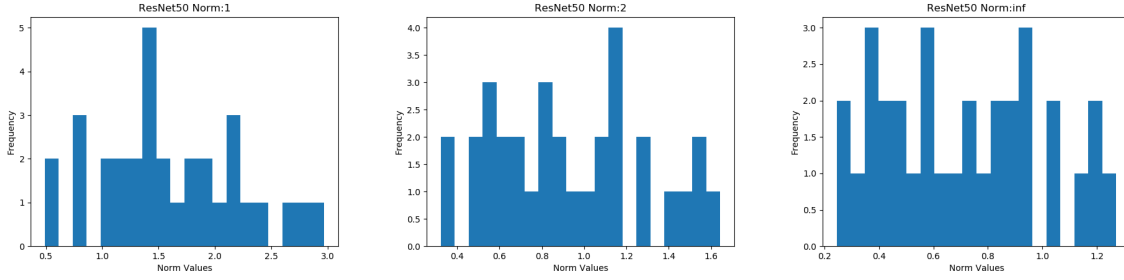# Examining Hermite Coefficients
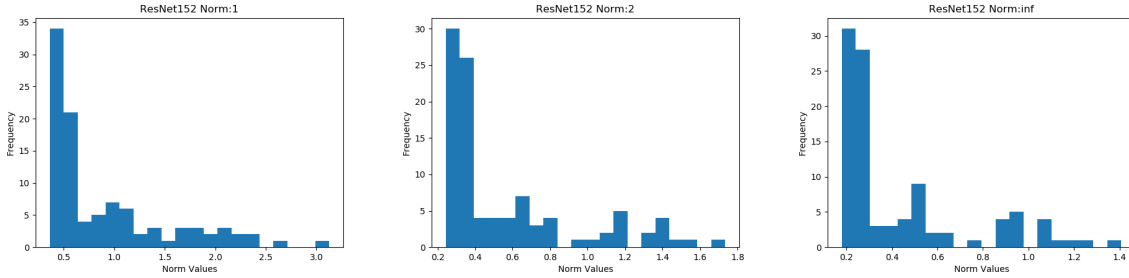
In this report, we review the distribution of hermite coefficients' norm values over different network architectures. We plot the histograms for L_1, L_2 and L_∞ norms considering ResNet18, ResNet50 and ResNet152 architectures. These plots have been created for the coefficient values obtained at the end of training. We infer from the plots that the coefficients of hermite polynomials in the neural network don't blow up implying that the capacity of networks remains doesn't increase.

ResNet18

ResNet50

ResNet152