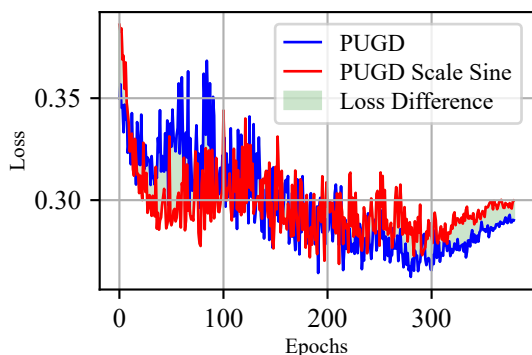
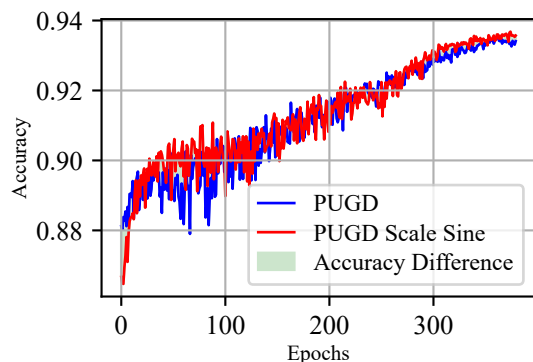


# Perturbation Scale Tuning with Sine and Cosine

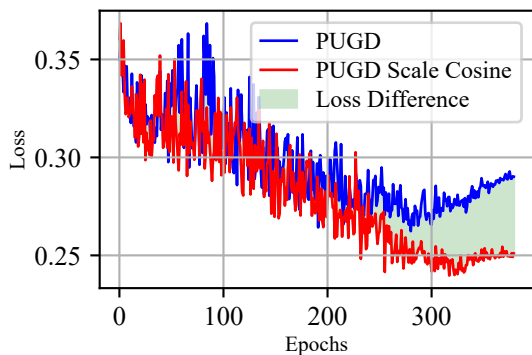
(a) PUGD vs PUGD Scale Sine Loss



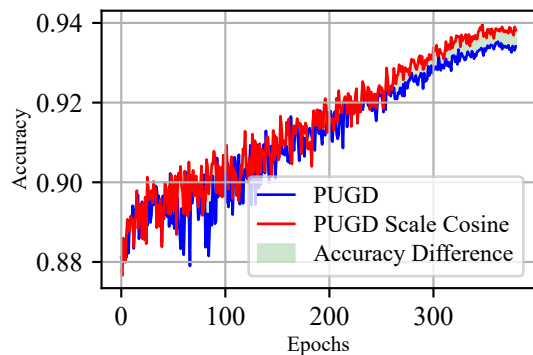
(b) PUGD vs PUGD Scale Sine Accuracy



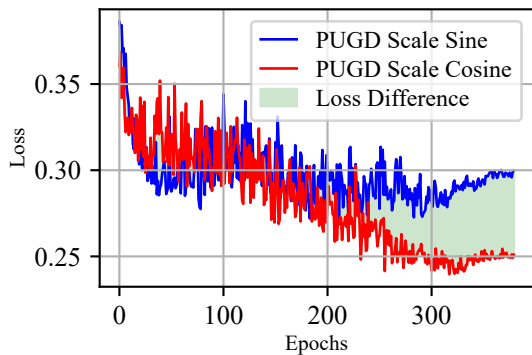
(c) PUGD vs PUGD Scale Cosine Loss



(d) PUGD vs PUGD Scale Cosine Accuracy



(e) PUGD Scale Sine vs Cosine Loss



(f) PUGD Scale Sine vs Cosine Accuracy

