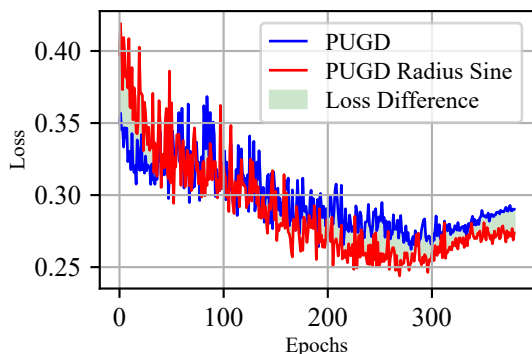
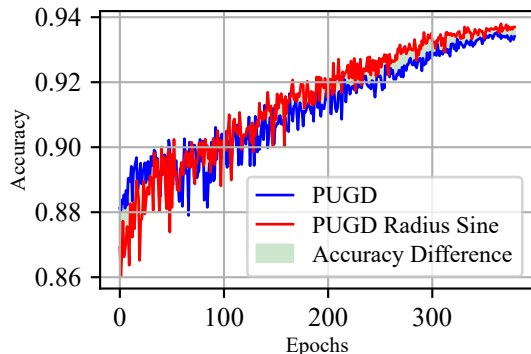


# Perturbation Radius Tuning with Sine and Cosine

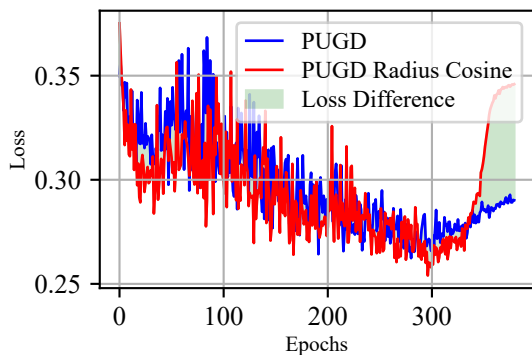
(a) PUGD vs PUGD Radius Sine Loss



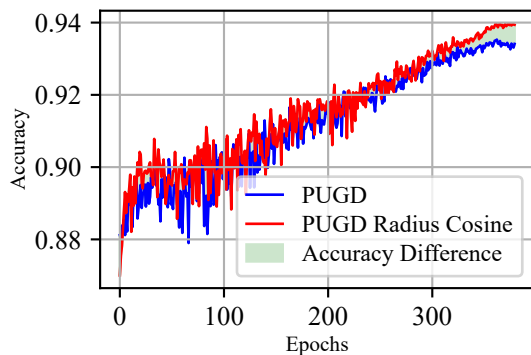
(b) PUGD vs PUGD Radius Sine Accuracy



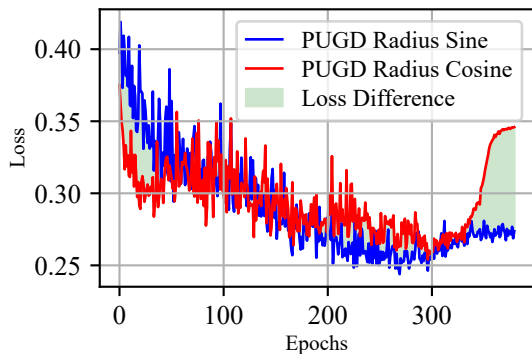
(c) PUGD vs PUGD Radius Cosine Loss



(d) PUGD vs PUGD Radius Cosine Accuracy



(e) PUGD Radius Sine vs Cosine Loss



(f) PUGD Radius Sine vs Cosine Accuracy

