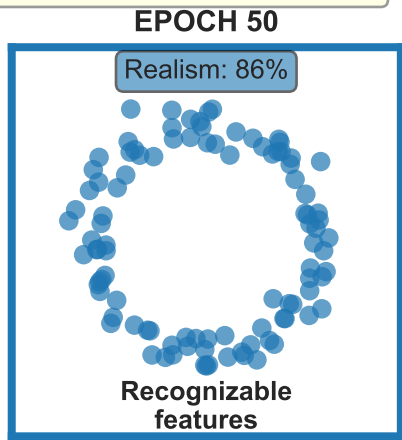
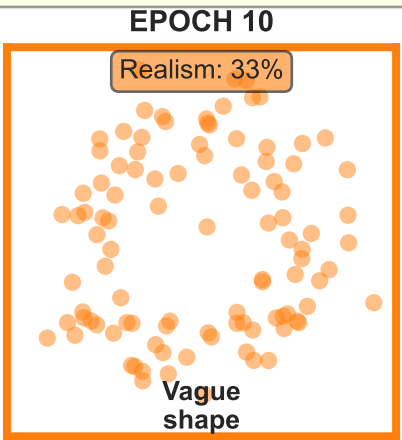
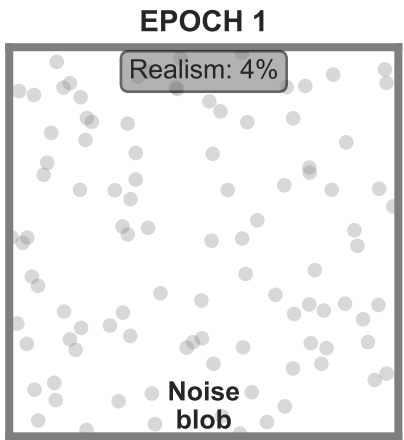


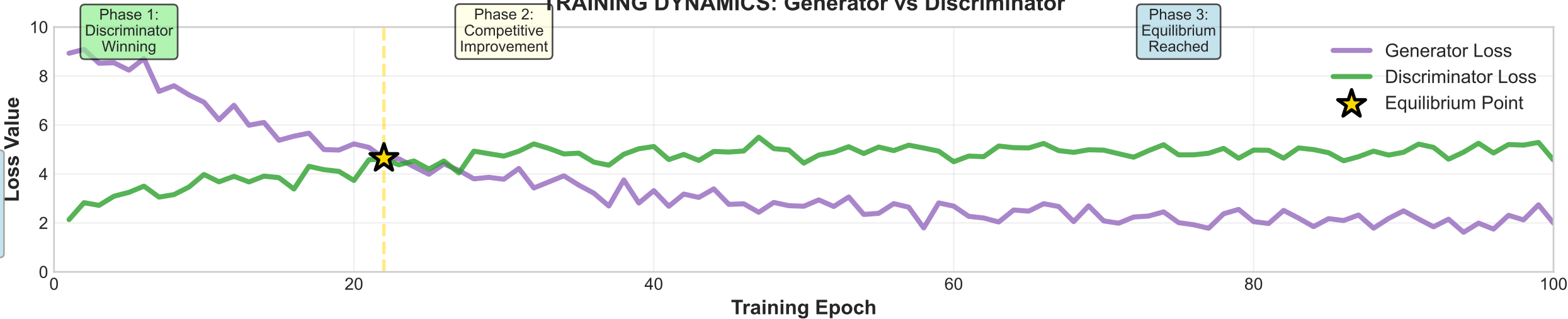
ADVERSARIAL TRAINING: Two Competing Programs Learning Together

TWO PROGRAMS: Generator (creates synthetic data) vs Discriminator (detects fakes)
Both improve through competition - Generator learns to create realistic data by fooling Discriminator

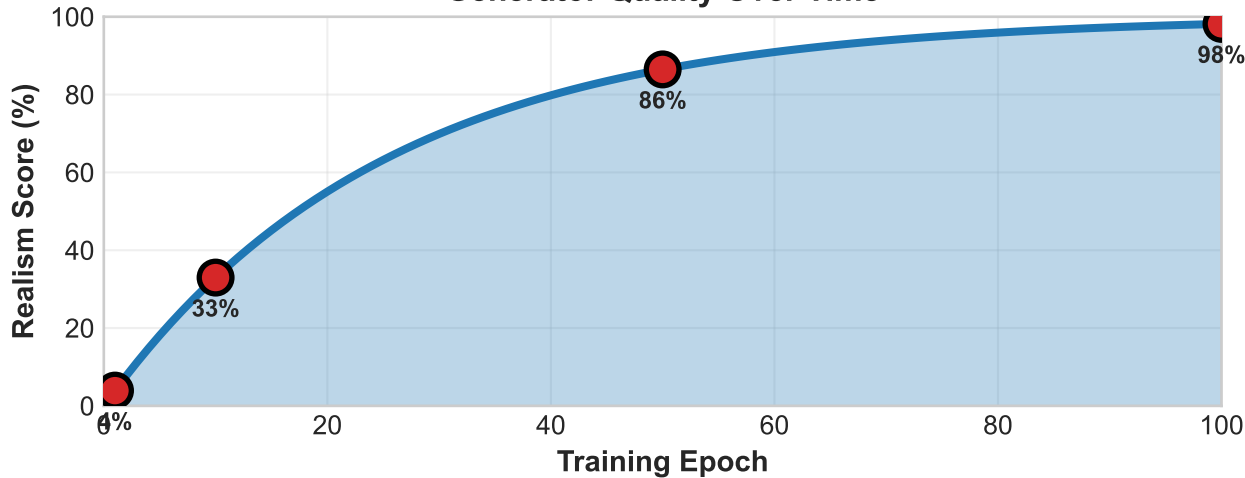


QUALITY:
Epoch 1:
Random noise
Epoch 100:
Realistic data

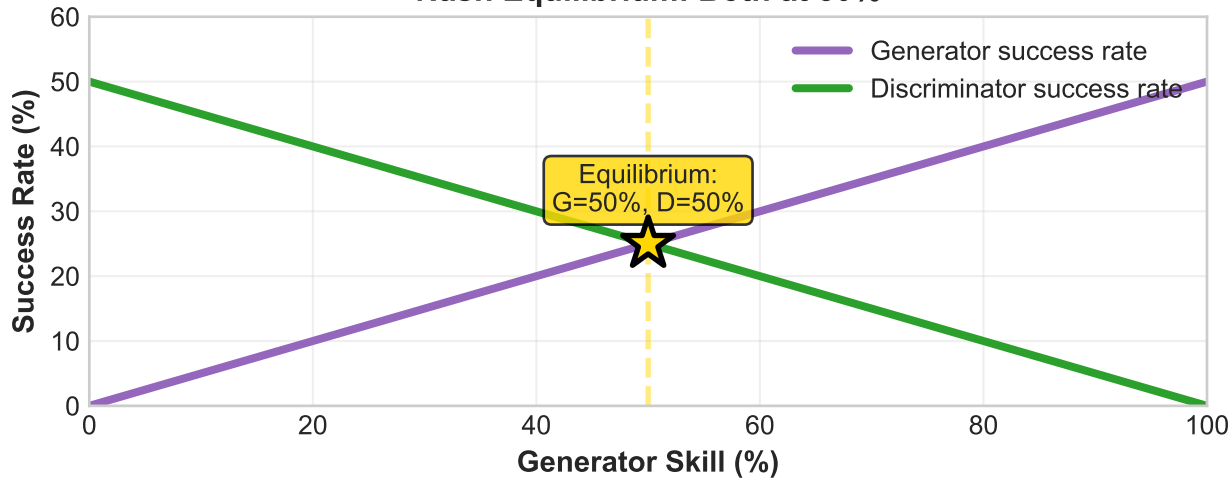
TRAINING DYNAMICS: Generator vs Discriminator



Generator Quality Over Time



Nash Equilibrium: Both at 50%



EQUILIBRIUM:
Discriminator cannot
reliably detect fakes
= Generator creates
perfect imitations