

Figure 2: Our architecture: Input images I and noise \vec{n} are first fed to the generator g_{Θ_g} (red), which processes the image using a CNN f_{Θ_f} , generates image features \mathbf{X}' , passes those to an attention mechanism a_{Θ_a} that generates a dynamic image representations \vec{z} and attention vectors $\vec{\alpha}$. \vec{z} is fed to an LSTM that produces triples \tilde{t}_e . During training, these triples are passed along with ground truth triples t_e to the discriminator d_{Θ_d} (blue) that contains the same components as the generator. The discriminator only produces a score, however. During test time all \tilde{t}_e s and α s are passed to g'' which resolves the triples into a graph G(V, E).