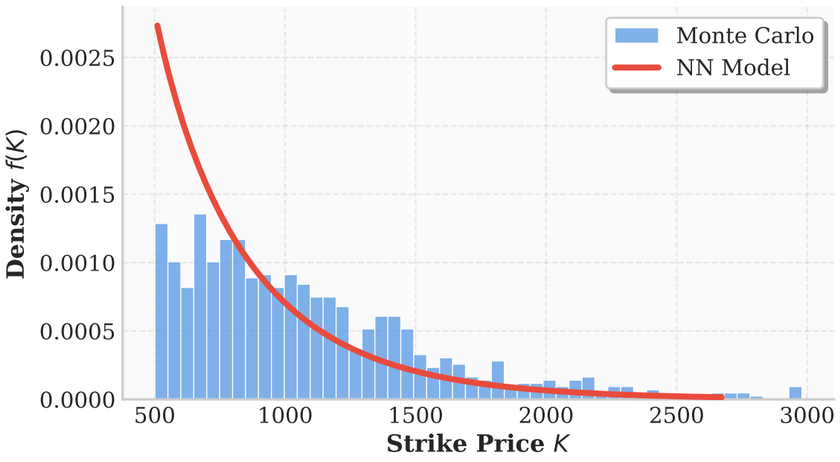
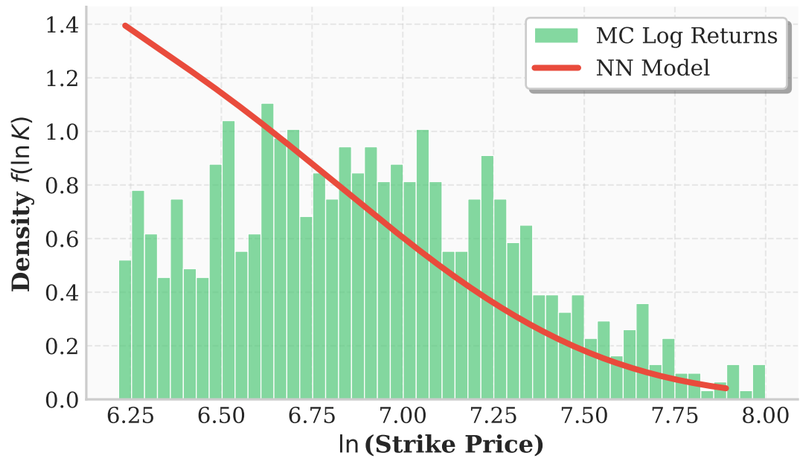
PDF Analysis: Neural Network Synthetic Local Volatility Model
Monte Carlo with $dS_t = rS_t dt + \sigma_{NN}(t, S)S_t dW_t$

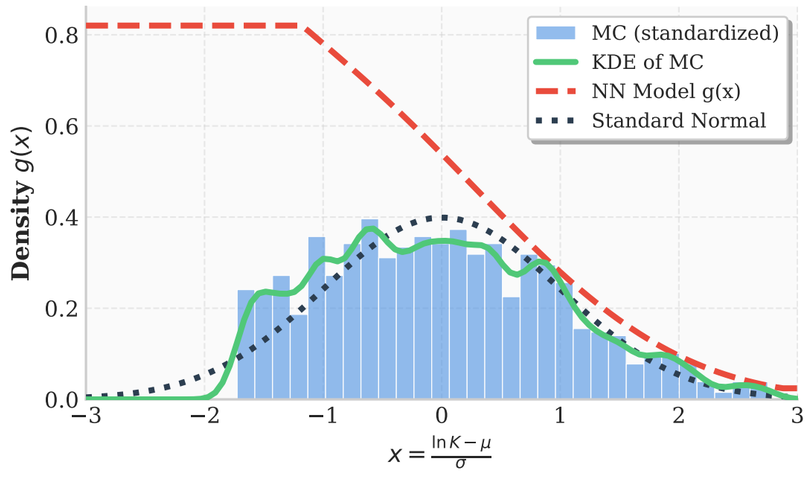
Strike Distribution (T = 0.25)



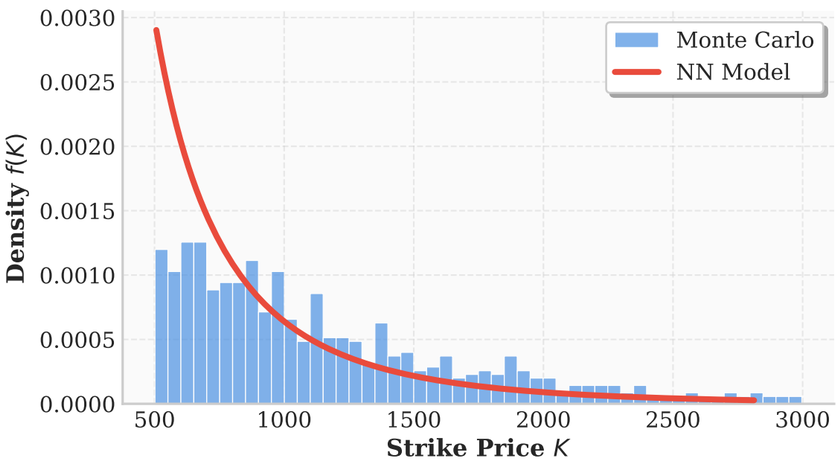
Log-Normal Distribution (T = 0.25)



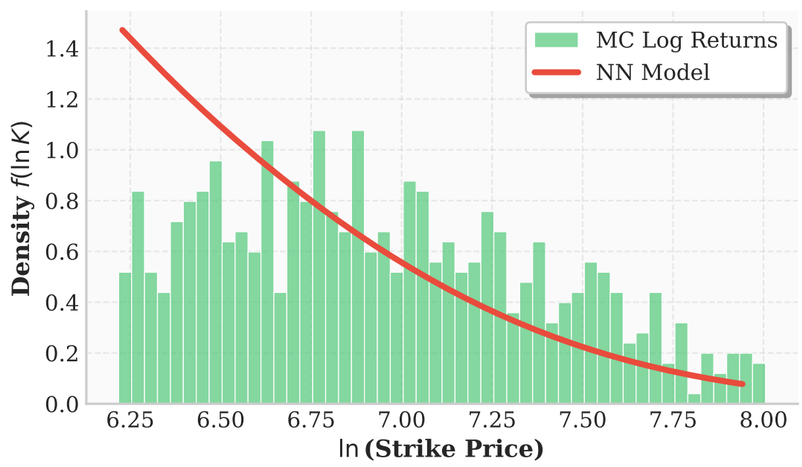
Gaussian Space (T = 0.25)
$\mu = 6.72$, $\sigma = 0.41$
Skew=0.34, ExKurt=-0.52



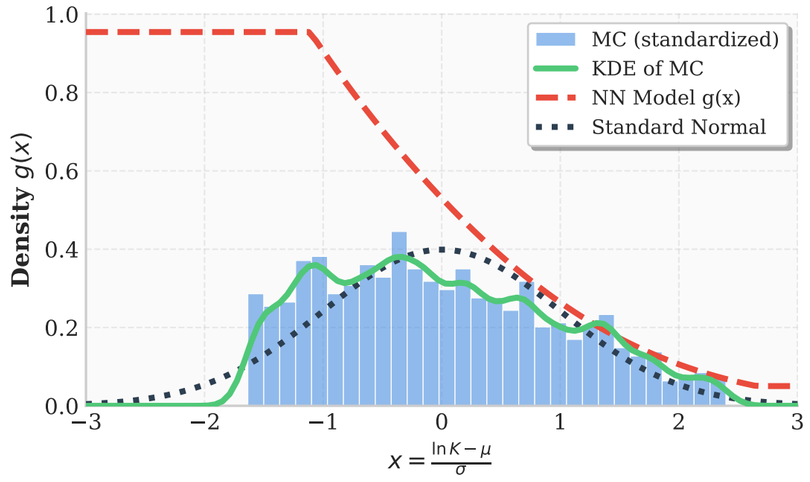
Strike Distribution (T = 0.50)



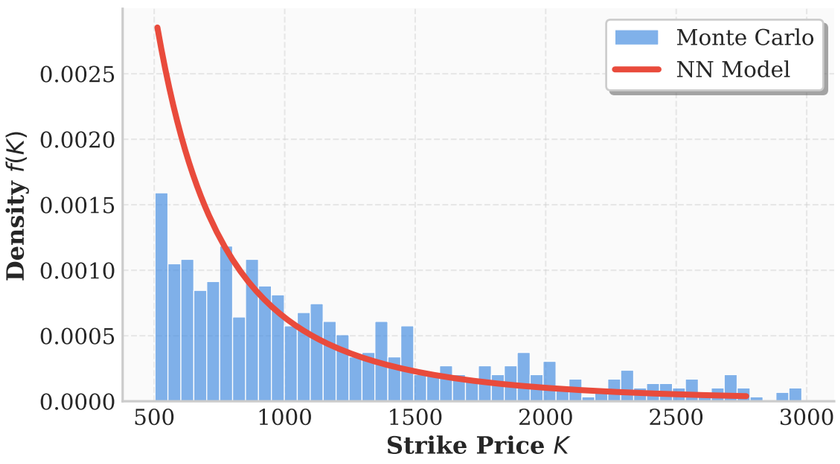
Log-Normal Distribution (T = 0.50)



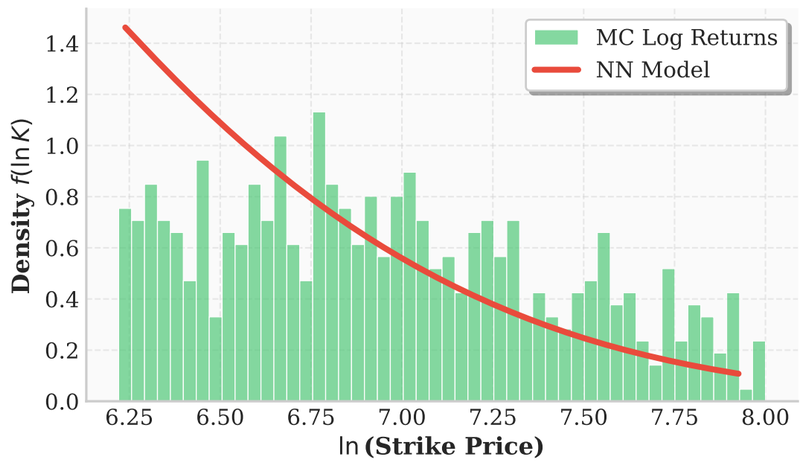
Gaussian Space (T = 0.50)
$\mu = 6.73$, $\sigma = 0.46$
Skew=0.36, ExKurt=-0.77



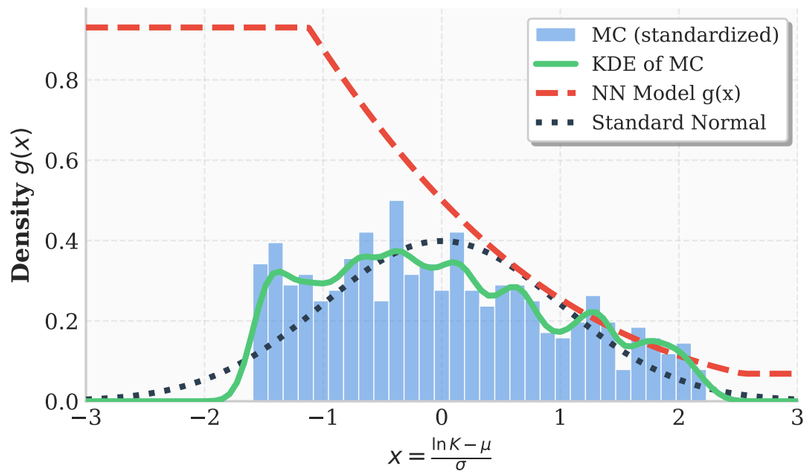
Strike Distribution (T = 0.75)



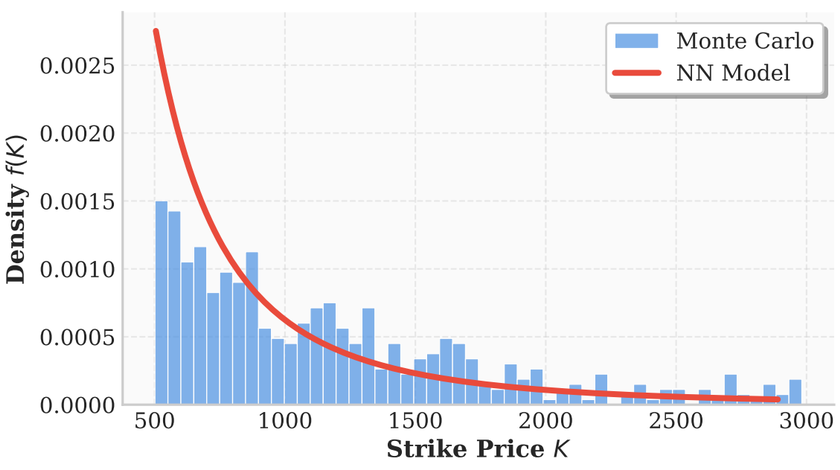
Log-Normal Distribution (T = 0.75)



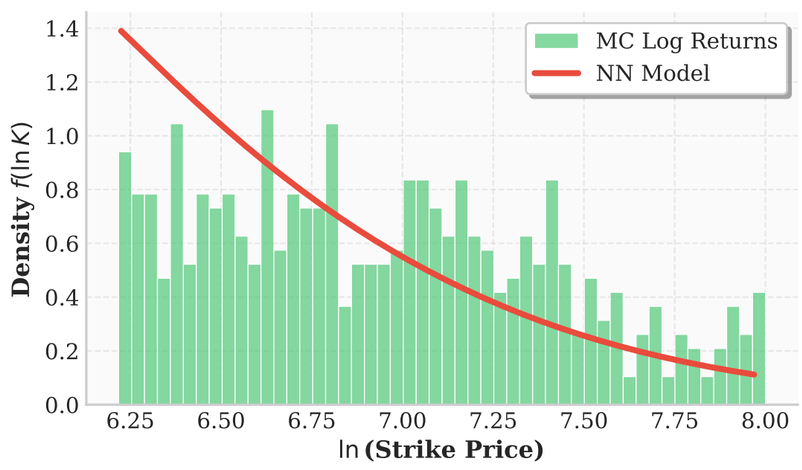
Gaussian Space (T = 0.75)
$\mu = 6.76$, $\sigma = 0.46$
Skew=0.34, ExKurt=-0.85



Strike Distribution (T = 1.00)



Log-Normal Distribution (T = 1.00)



Gaussian Space (T = 1.00)
$\mu = 6.76$, $\sigma = 0.48$
Skew=0.36, ExKurt=-0.79