



Autoencoder for Sinusoidal Signals

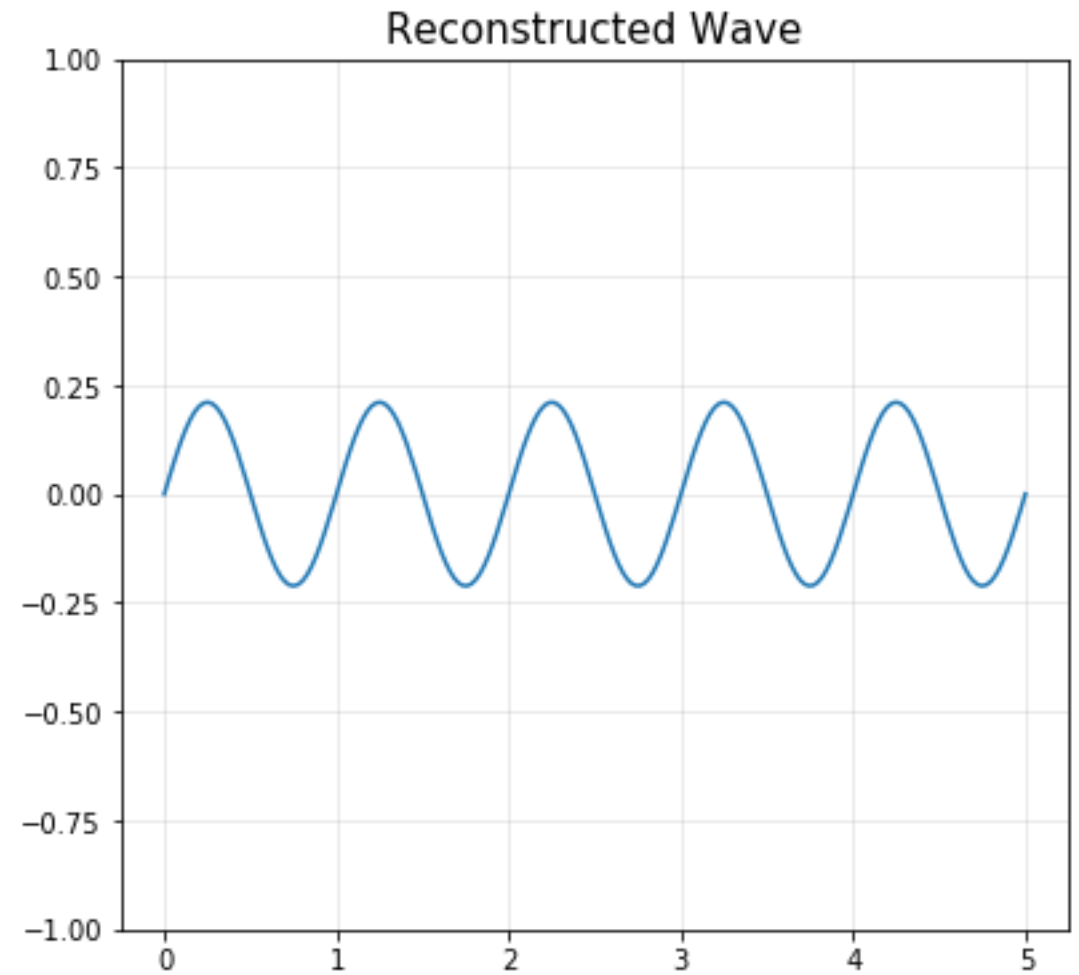
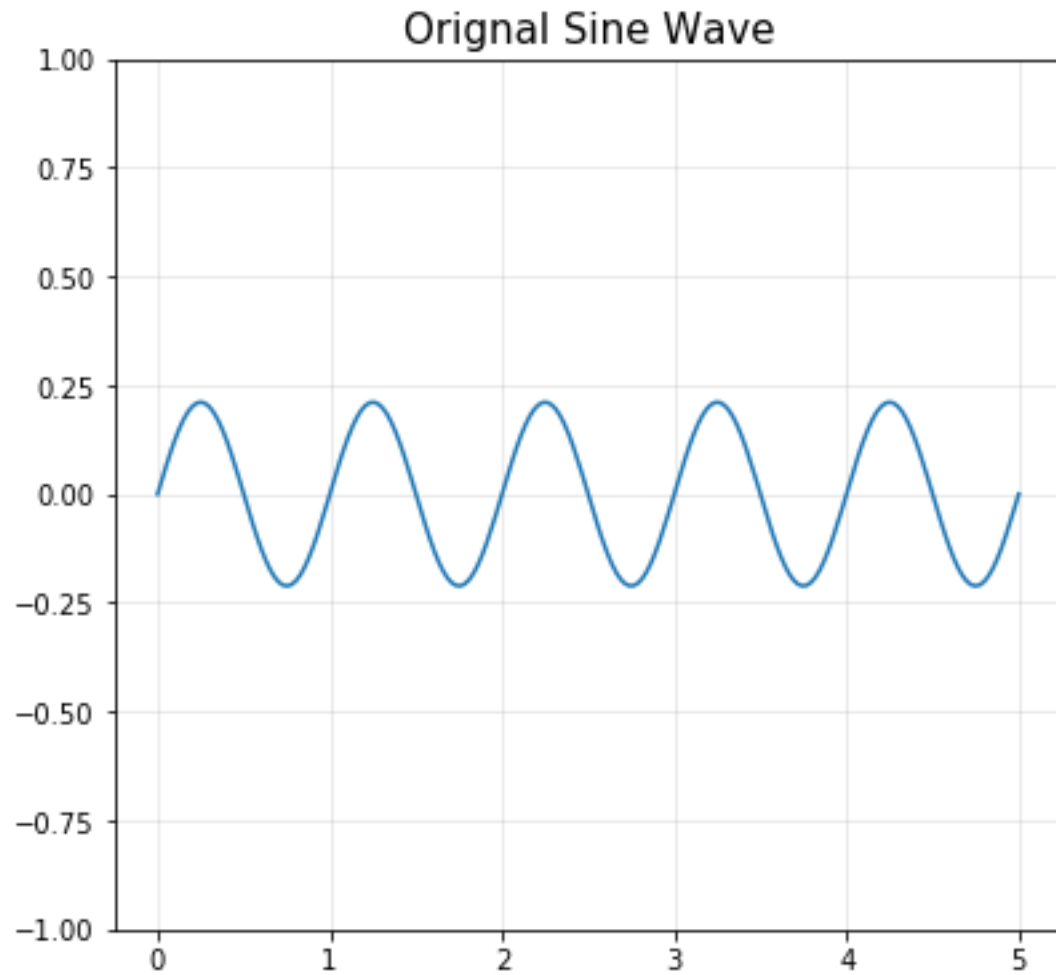
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Autoencoder for Sine Wave

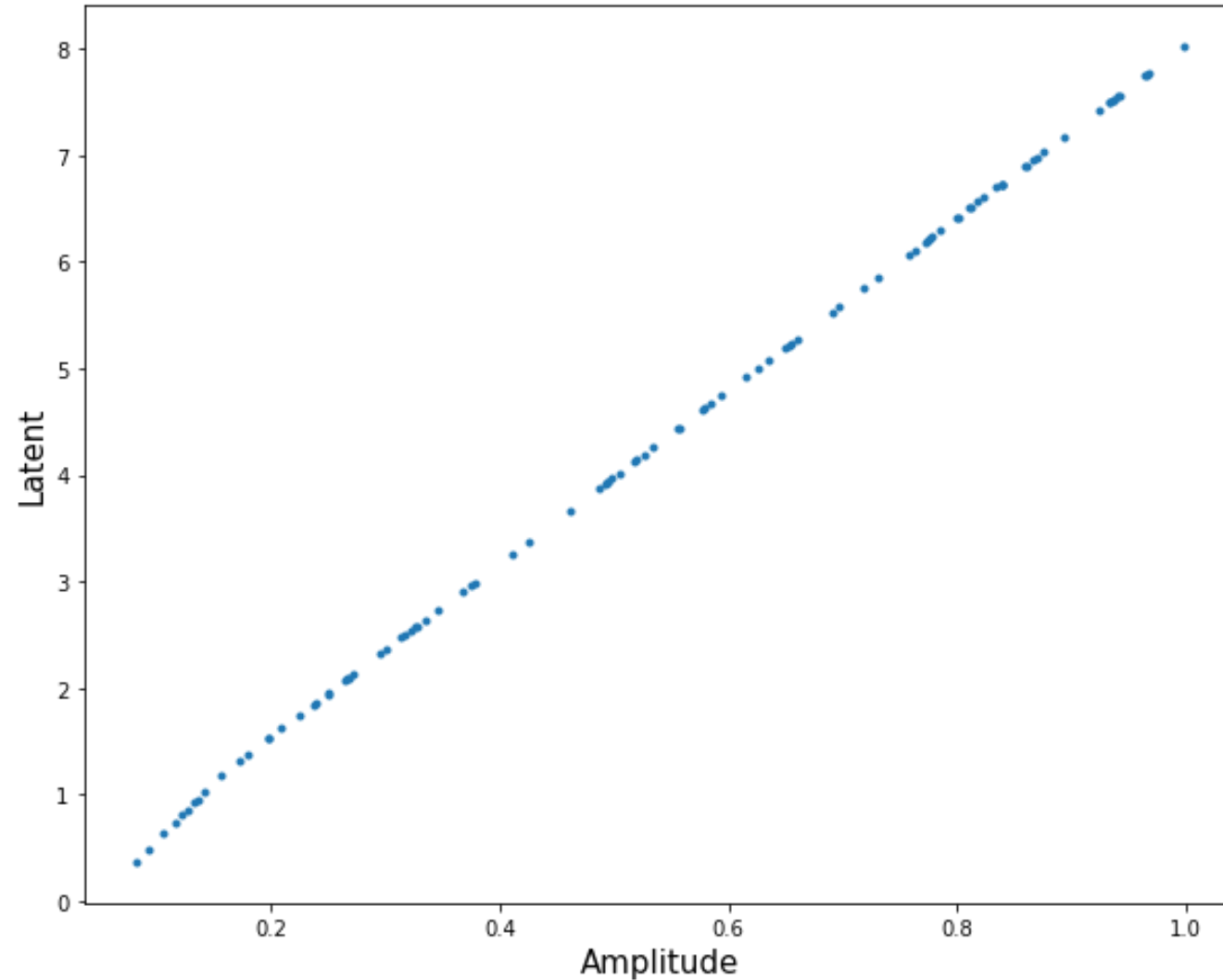
- We would like to see if the autoencoder is able to pick up key features such as amplitude, phase, and frequency in sinusoidal signals

$$y = A \sin(2\pi ft + \theta)$$

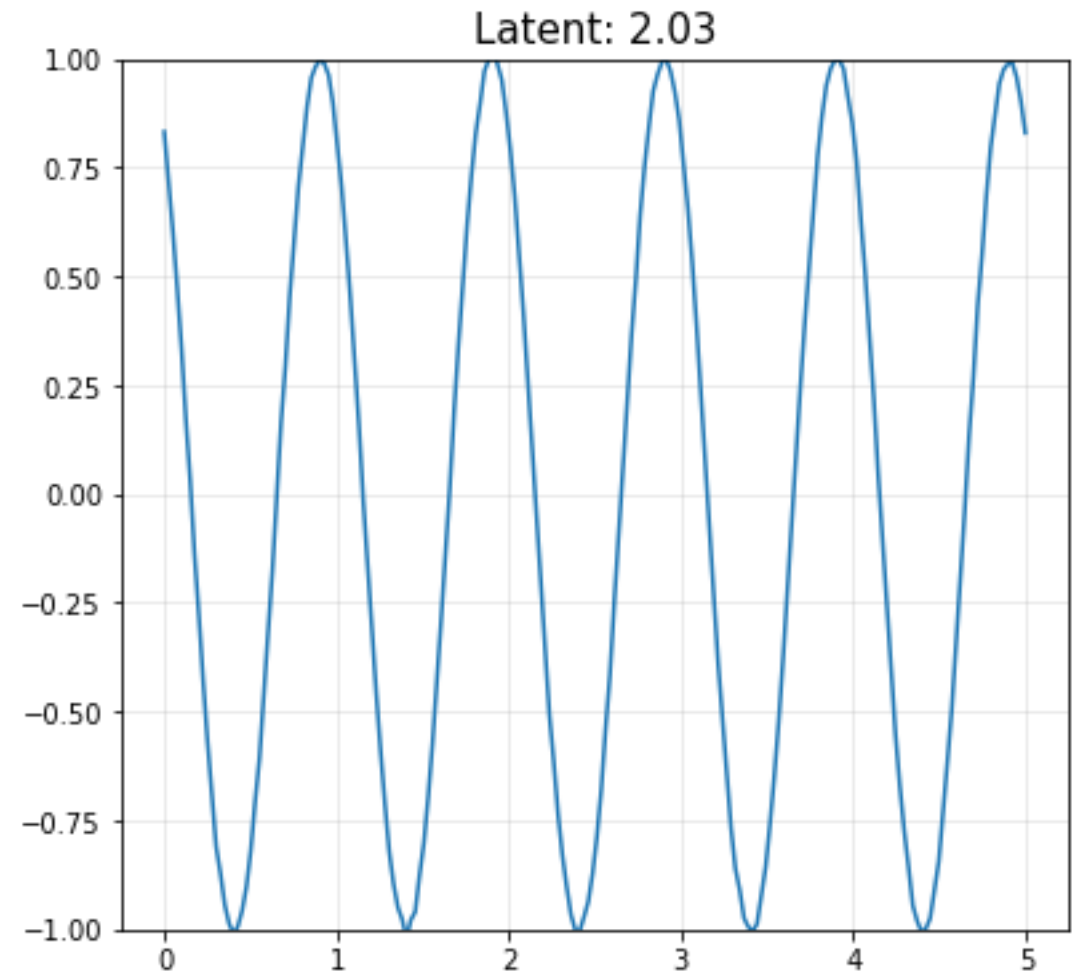
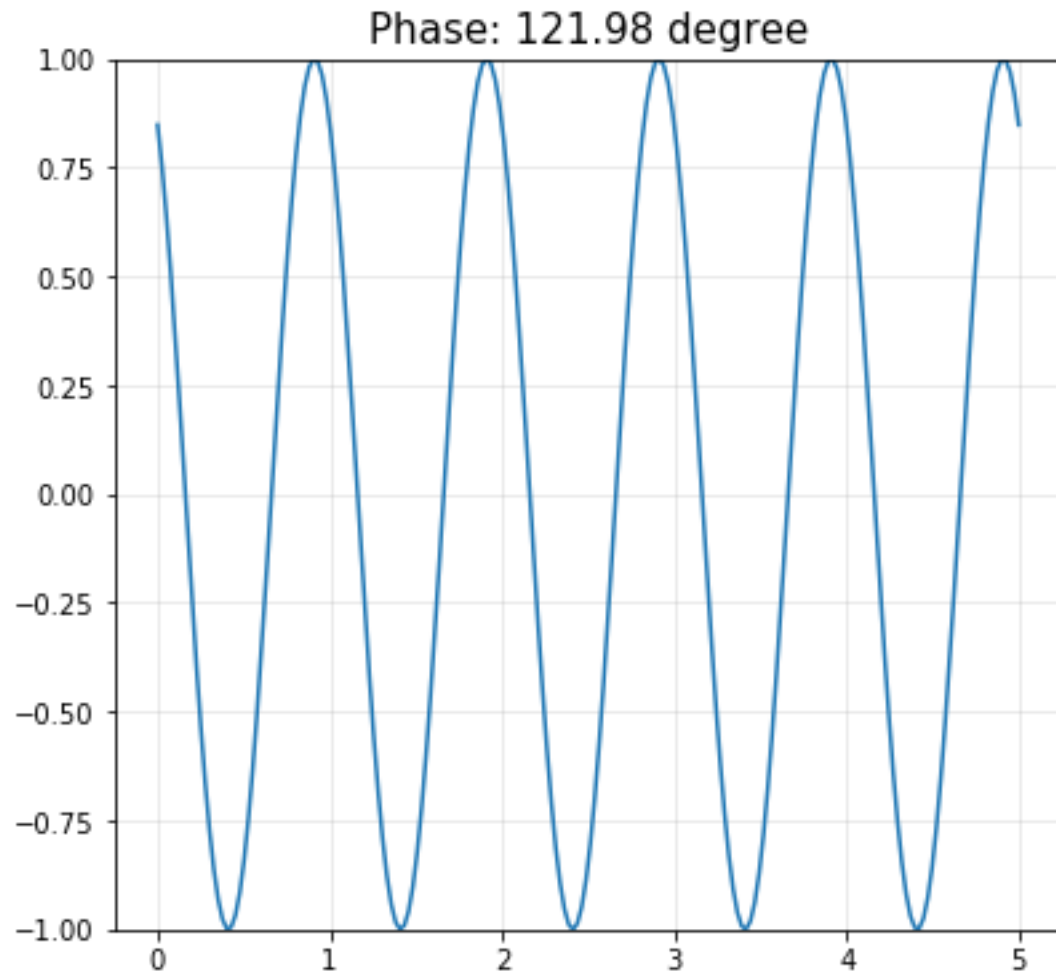
Autoencoder for Sine Wave: Amplitude



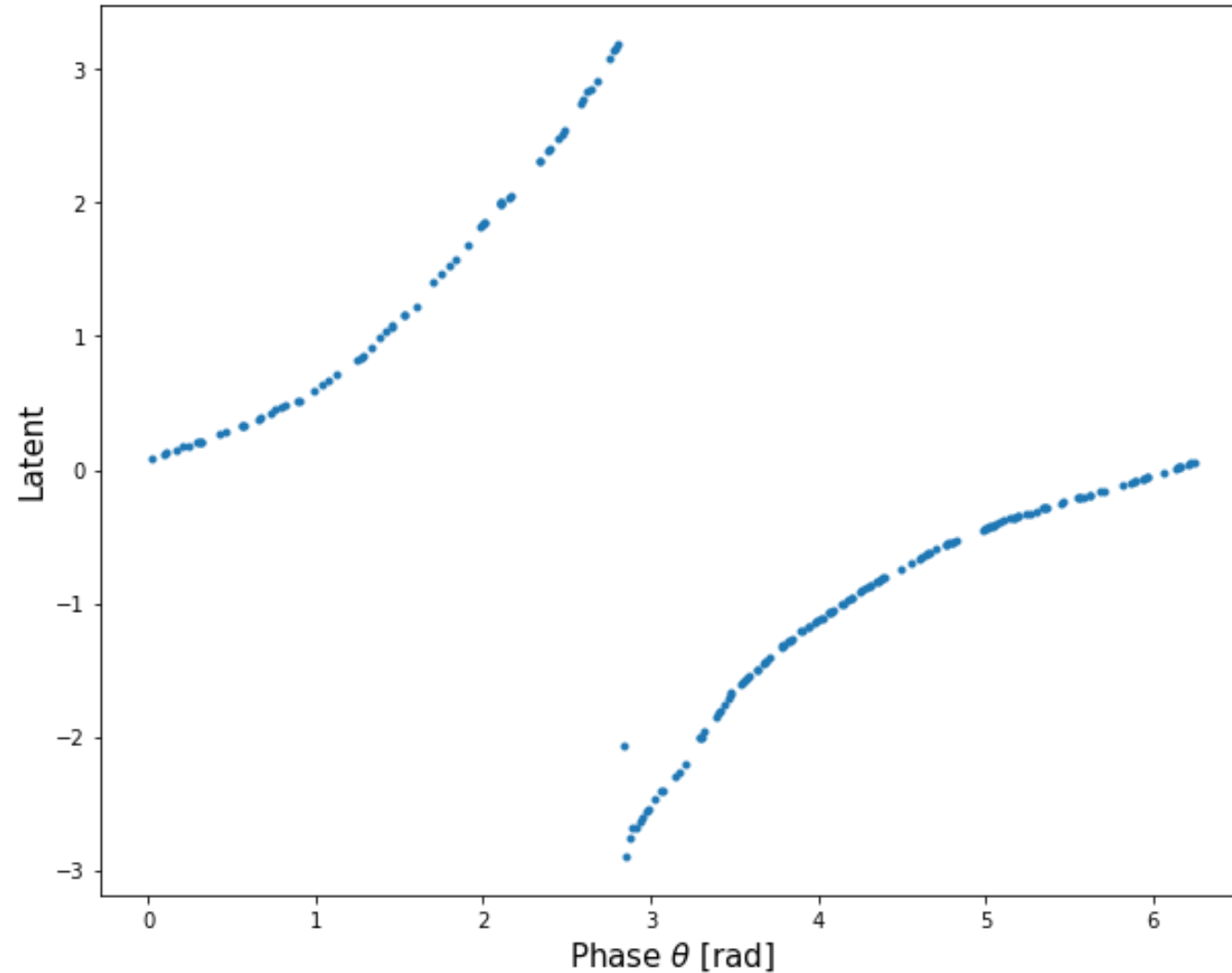
Autoencoder for Sine Wave: Amplitude and its Latent Space



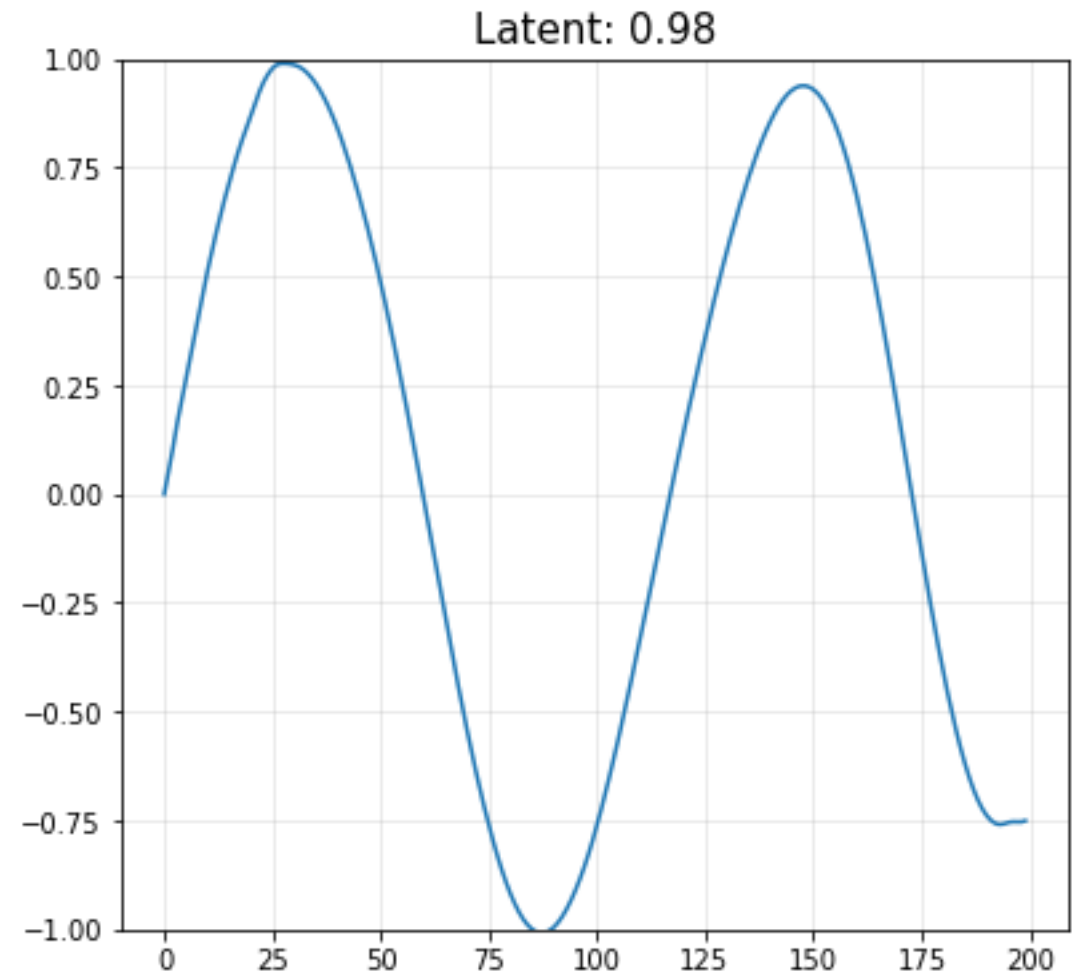
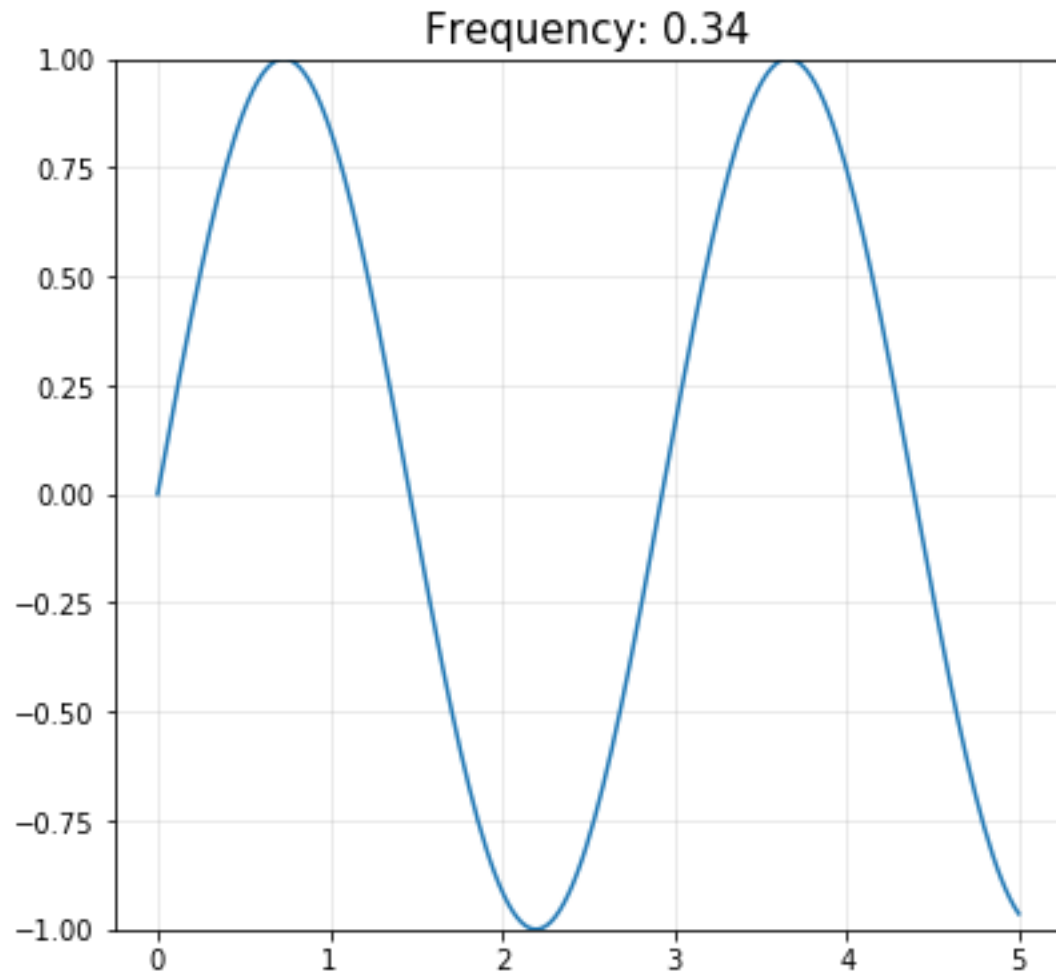
Autoencoder for Sine Wave: Phase



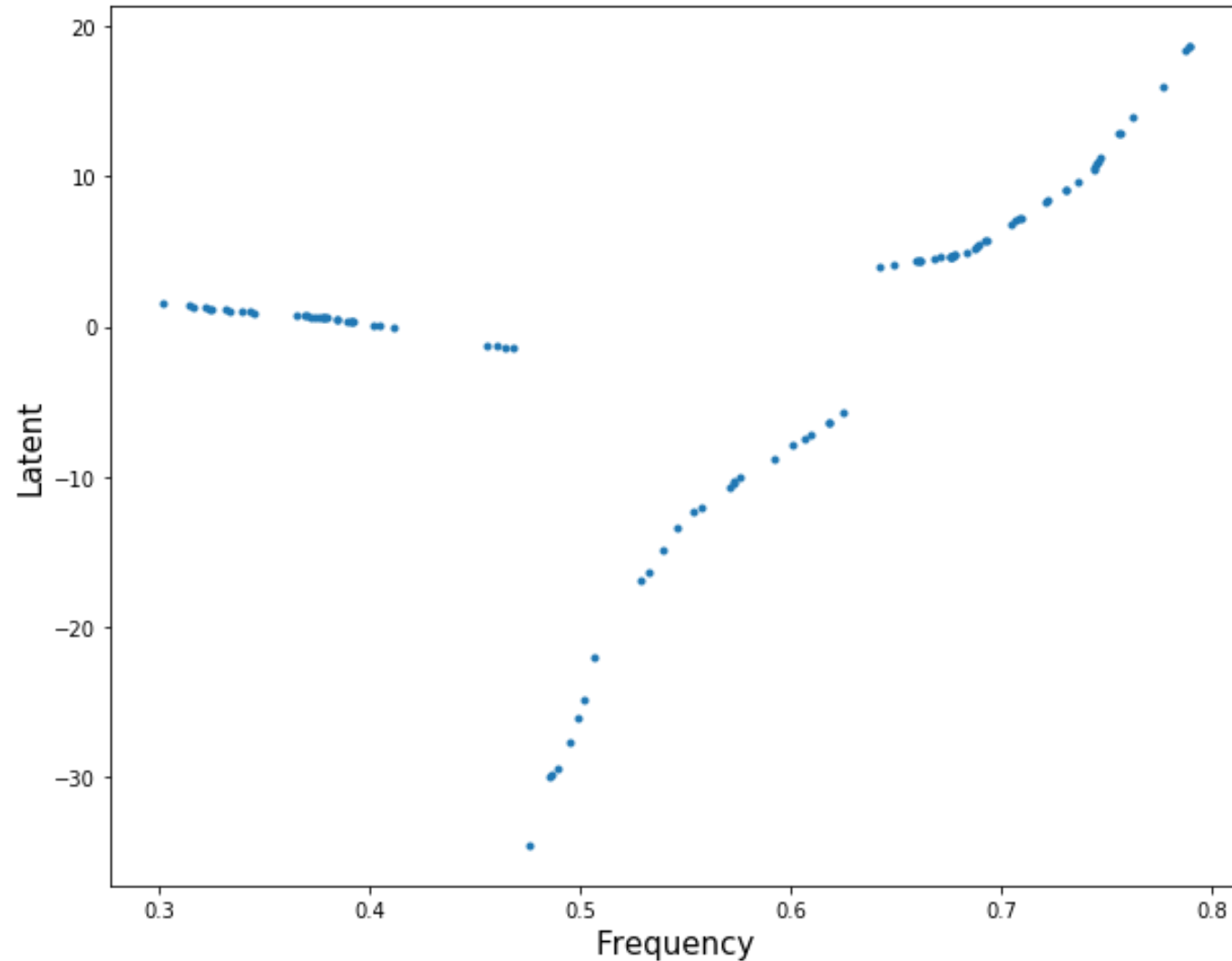
Autoencoder for Sine Wave: Phase and its Latent Space



Autoencoder for Sine Wave: Frequency



Autoencoder for Sine Wave: Frequency and its Latent Space



Autoencoder for Sine Wave: All Three Components

