

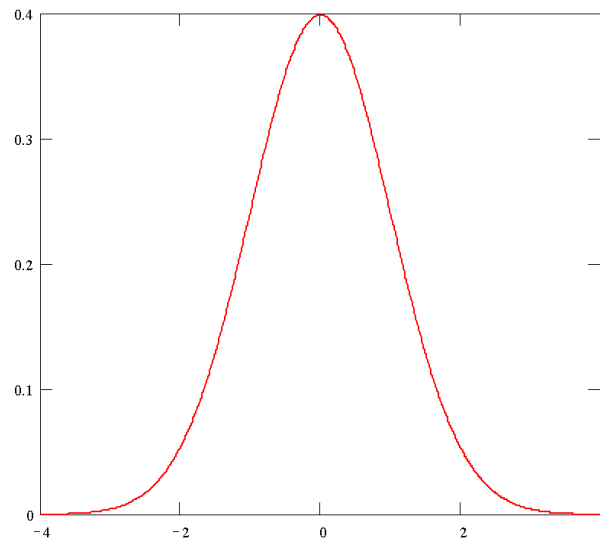
Gaussian Smoothing

Smooths an image using a weighted mean based on the 2D Gaussian point spread function.

The 2D general form of the Gaussian equation

$$F(x) = \frac{1}{\sqrt{2\pi\sigma^2}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$$

Where x is the independent variable, μ is the mean, and σ is the standard deviation of the set. The shape of the the Gaussian with a mean of 0 and a standard deviation of 1 is shown below.



The circularly symmetric 3D Gaussian equation centered at the origin has the form of:

$$F(x, y) = \frac{1}{2\pi\sigma} e^{-\frac{x^2+y^2}{2\sigma^2}}$$

[TBD]



