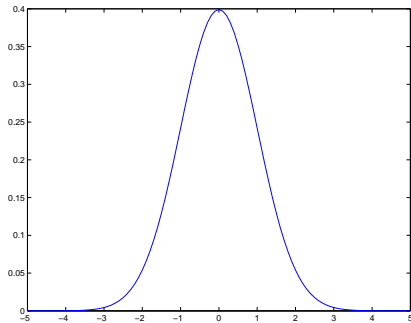


COMMENTS ON PAGE 22

- ▶ This is a standard one dimensional Gaussian distribution.
- ▶ All Gaussians have the same shape subject to scaling and displacement.
- ▶ If x is distributed $N(x; \mu, \sigma^2)$, then $y = (x - \mu)/\sigma$ is distributed $N(y; 0, 1)$.

Comments on page 22



I can't get the meaning of $y=(x-u)/\sigma$. how to get it?

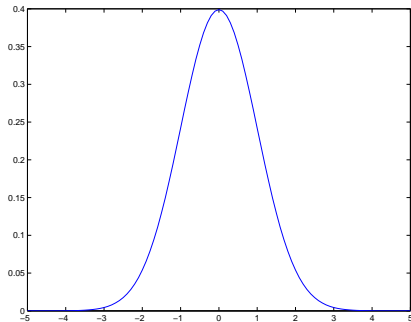
If we define a new variable y so:

$$y = (x-u)/\sigma$$

then y is distributed normally with mean 0 and standard deviation 1. We've converted an arbitrary normal distribution into a standard one.

- ▶ This is a standard one dimensional Gaussian distribution.
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Of course that should be:

$$y = (x-u)/\text{sigma}$$

thank you very much I understand it

Comments on page 22