

Heavy-tailed Distribution And Light-tailed Distribution

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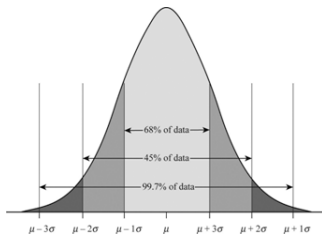
$$F(x; \lambda) = \begin{cases} 1 - e^{-\lambda x}, & x \geq 0 \\ 0, & x < 0 \end{cases}$$

???????????????????? ????0????????????????????
Gumbel ?????????????????????



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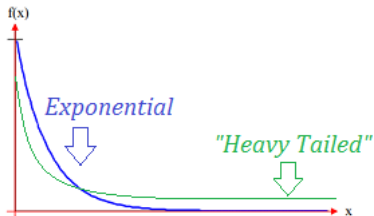
$$???y = \frac{1}{\sqrt{2\pi}\sigma} e^{\frac{-(x-\mu)^2}{2\sigma^2}} ???\mu????\sigma???????x??$$

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?????: $??? + ??????????????????????t^\gamma, \gamma > \frac{1}{2}.$

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$?x \rightarrow \infty ?$??????0?????????????????????

$$\lim_{x \rightarrow \infty} e^{\lambda x} F(x) = \infty$$

??? $\lambda > 0$, $F(x)$???????

[illegible]

tailed distribution??????Long-tailed

distribution???????Subexponential distribution?

???? $\{X(t), t \geq 0\}$????????????????????:

- $X(0) = 0$;
- ????;
- ????;
- ?????.

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