

Example

Movie rank is 0.8 ± 0.1

$$\mathbb{E}x = \frac{a}{a+b} = 0.8$$

$$\text{Var}[x] = \frac{ab}{(a+b)^2(a+b-1)} = 0.1^2$$

$$\Rightarrow a = 12, b = 3$$

