

Probabilistic Logic Networks for Temporal and Procedural Reasoning

Nil Geisweiller, Hedra Yusuf

Artificial General Intelligence 2023 (AGI-23)



SingularityNET

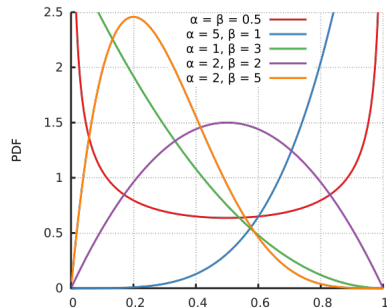


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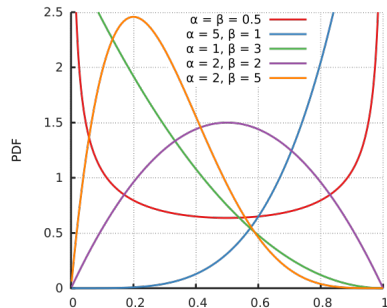
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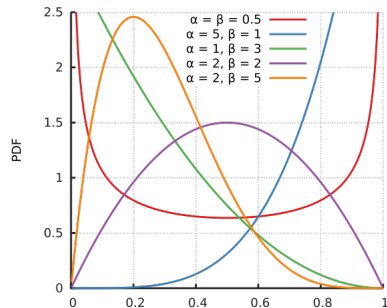
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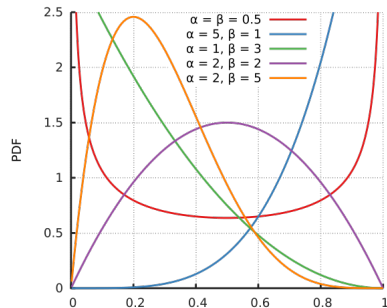
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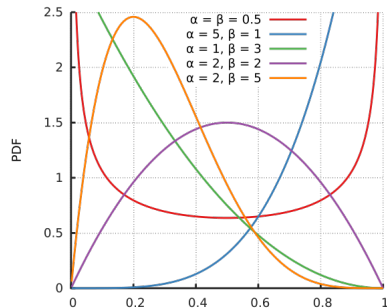
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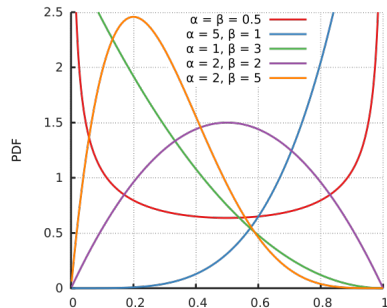
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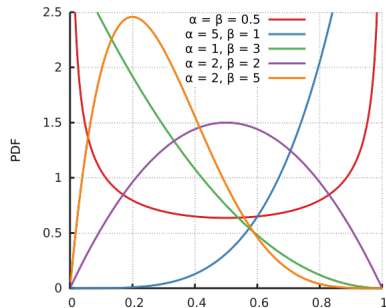
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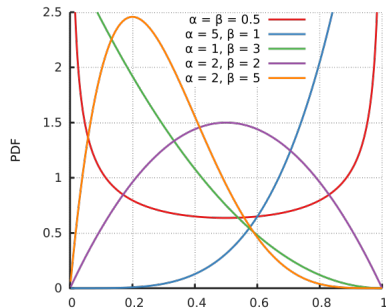
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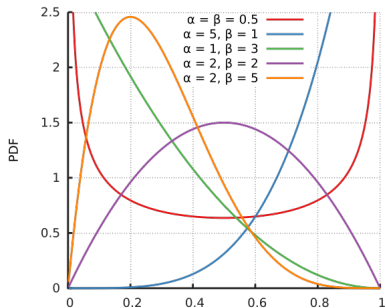
- Implication Direct Introduction (IDI)

$$\frac{P(a_1) \stackrel{\text{m}}{=} TV_1^P \quad Q(a_1) \stackrel{\text{m}}{=} TV_1^Q \quad \dots \quad P(a_n) \stackrel{\text{m}}{=} TV_n^P \quad Q(a_n) \stackrel{\text{m}}{=} TV_n^Q}{P \rightarrow Q \stackrel{\text{m}}{=} \phi_{IDI}(TV_1^P, \dots, TV_n^Q)} \text{ (IDI)}$$



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- Deduction (D)

$$\frac{P \rightarrow Q \equiv TV^{PQ} \quad Q \rightarrow R \equiv TV^{QR} \quad P \equiv TV^P \quad Q \equiv TV^Q \quad R \equiv TV^R}{P \rightarrow R \equiv \phi_D(TV^{PQ}, \dots, TV^R)} \quad (D)$$