Why

Definition

The mutual information graph of a distribution over a product of a n sets is a weighted graph which is complete and whose edge weights are given by the mutual information between the marginals over pairs of components.

Mutual Information Graph

Mutual Information

Relative Entropy

Cross Entropy   Entropy   Similarity Functions

Logarithm   Probability Distributions   Metrics

Weighted Graphs   Intervals   Real Summation   Distance

Real Numbers   Natural Summation   Length Common Notions

Rational Numbers   Family Operations   Natural Sums   Probability Outcomes

Integer Numbers   Algebras   Cardinality   Probability

Families   Operations   Injective Functions   Common Sense

Functions

Graphs   Zero   Relations

Equation Solutions   Ordered Pairs   Natural Numbers

Unordered Pairs   Empty Set   Set Unions   Set Intersections

Power Set   Set Specification

Set Inclusion   Sentences

Equations   Set Equality

Identity   Sets

Objects