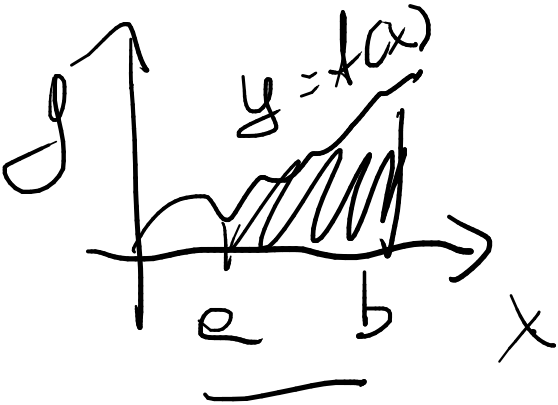


DISTRIBUZIONI

CONTINUA



DISCRETA

$[0, \dots, 100]$

RANGE /

INTERVALLO

$$\int_a^b f(x) = P(x)$$

DISTRIBUZIONI DI PROBABILITÀ

EVENTO $\rightarrow e$

$\downarrow e$

SPAZIO

$\rightarrow [\dots]$

CAMPIONARIO

$e \begin{cases} 1 & \text{SUCCESS} \\ 0 & \text{(DISCRETA) } e \text{ } e^c \end{cases}$
no!

$$q \in [0, 1]$$

Bernoulli

$$\begin{cases} q & \text{se } z=1 \\ 1-q & \text{se } z=0 \end{cases}$$

$\begin{cases} / & \backslash \\ Y & N \end{cases}$

$$q \in [0, 1]$$

Rademacher

$$\begin{cases} q & \text{se } z=1 \\ 1-q & \text{se } z=-1 \\ 0 & \text{altrimenti} \end{cases}$$

$\begin{cases} / & | & \backslash \\ Y & N & Z \end{cases}$

$\Omega = \text{SPAZIO DEGLI OUTCOMES (discreti)}$

$$P(A) = \sum_{w \in A} p(w)$$



DISCRETA \rightarrow SOMMA
LIMITATA

DISTRIBUZIONE $\rightarrow P$ $P(A) = \frac{|A|}{|\Omega|}$

DENSITÀ $\rightarrow P$ $p(w) = \frac{1}{|\Omega|}$

UNIFORME DISCRETA

$$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} \dots$$

Diagram illustrating the uniform discrete distribution for a binary outcome (1 or 0). Each term $\frac{1}{2}$ is shown with a bracket underneath it, and below each bracket are the two possible outcomes, 1 and 0, indicating that each outcome has a probability of $\frac{1}{2}$.

Ω, F, \mathbb{P} DISTRIBUTORS

1
TUTTO
SPAZIO
SUSM

$A \quad B \rightarrow$ SUSM

VARIABILI

AUSARE RIS

CARTA $\begin{cases} \text{rosso} \\ \text{nero} \end{cases}$

42 CARTE
 Ω

$F \begin{cases} 0 \\ 1 \end{cases}$

$P(A), P(B) \rightarrow$ CONDIZIONALI
(BAYES)

$$P(A|B) = \frac{P(A \cap B)}{P(B)} \leftarrow P(A) \cdot P(B)$$

BAZES \rightarrow CON CAT. EVENT
CONDITIONAL

$$P(A|B) = \frac{P(A)}{P(B)} \cdot P(B|A)$$

EVENT.

$$\rightarrow \prod_{i=1}^n P(W_i)$$

INDEPENDENT

EVENT

$$\rightarrow \sum_{i=1}^n P(W_i)$$

DISJOINT

BINOMIAL

\rightarrow (M) \leftarrow TURN
(K) \leftarrow CONSIDER

$$P(k) = \binom{m}{k} \cdot q^k \cdot (1-q)^{m-k}$$

DISCRETE ... (END :))

↓
TO BE CONTINUED
ON CONTINUOUS

NO!