Lecture 4: Continuous Random Variables

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Continuous random variables

**PREDICTIVE
SCIENCE LABORATORY**

Continuous random variables

- A continuous random variable models the result of an experiment that can potentially take infinitely many values.

- That is, it is a function:

$$X : \Omega \rightarrow \mathbb{R}$$

Example of continuous random variable

- You have a machine that manufactures steel balls.

- You manufacture a steel ball and you measure its mass.

$$X = \text{mass of} \quad \bullet$$