

Discrete random variables or continuous random variables

We can make a list of the possible values the random variable takes.
e.g. counts, integers,
classification, fractions, etc.

—
—
—
—
⋮

usually used for measurements,
e.g. time, length, height,
width, age (if including decimals),
cannot put the possible values into a list;
instead the values come in intervals, e.g.

$(0, \infty)$ $[0, \infty)$

$[0, 1]$ $[0, 20]$

if your random variable can take on any of the values in an interval, it is a continuous random variable.