

Seaborn data visualization types:

Seaborn Function	Primary Plot Type	Primary Use
Distplot	Distributional (Histogram, KDE)	Visualizing the distribution of a single continuous variable.
Jointplot	Relational & Distributional	Showing the bivariate relationship between two variables, along with their individual (marginal) distributions.
Pairplot	Multivariate	Creating a grid of pairwise relationships (scatter plots) and distributions (histograms/KDEs) for all variables in a dataset.
Violinplot	Categorical/Distributional	Visualizing the full probability density (distribution shape) of a continuous variable across different categories.
Stripplot	Categorical	Drawing a scatter plot where one variable is categorical. Useful for visualizing all individual data points.
Swarmplot	Categorical	Similar to a stripplot, but adjusts points to avoid overlap so the distribution density is visible. Ideal for small to moderate datasets.
Barplot	Categorical	Visualizing the mean (or other estimator) of a continuous variable for different categories, often with error bars.
Countplot	Categorical	Showing the count (frequency) of observations in each bin or category of a categorical variable.
Pointplot	Categorical	Showing the estimates (e.g., mean) and confidence intervals of a continuous variable across different categories, useful for emphasizing changes across categories.
Line Chart	Relational/Temporal	Showing trends over time or an ordered sequence.
Bar Chart (Column Chart)	Categorical	Comparing the quantities or counts of different categories or groups.
Scatter Plot	Relational (Bivariate)	Visualizing the relationship or correlation between two numerical variables.

Seaborn Function	Primary Plot Type	Primary Use
Histogram	Distributional (Univariate)	Showing the distribution of a single continuous variable (frequency of values in bins).
Box Plot (Box-and-Whisker Plot)	Distributional/Categorical	Displaying the summary statistics (median, quartiles, range, outliers) of a distribution, especially for comparing distributions across categories.
Pie Chart	Compositional (Part-to-Whole)	Illustrating the proportion or percentage of a whole that each category represents.
Area Chart	Temporal/Compositional	Showing the magnitude of change over time and the relationship of parts to a whole.
Heatmap	Matrix	Visualizing the magnitude of values in a matrix using colour intensity (often for correlation).
Bubble Chart	Relational/Multivariate	Visualizing three or four dimensions of data where bubble size represents a third variable.
Treemap	Compositional/Hierarchical	Displaying hierarchical data using nested rectangles, where the size is proportional to the value.
catplot	Figure-Level Interface for Categorical plots	Acts as a wrapper for all specific categorical plots, letting you switch between them using the kind parameter.
regplot	Relational (Linear Regression)	Visualizing the relationship between two numerical variables (x and y) and fitting a straight-line regression model to the data. It also draws a shaded area representing the confidence interval for the regression estimate.
lmplot	Figure-Level Interface for Relational plots	Uses regplot internally. Designed for plotting linear relationships, but its key advantage is the easy use of faceting (creating multiple subplots).