Seabred Documentation

Release 0.0.1

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CHAPTER 1

Functions

seabred.plotting.lineplot (x, y, ctr_type='mean', err_type='std', show_trials=False, **kwargs)

Plot the values with mean/median and std/95% CI/quartile as shading. This uses the automatic/default/preset color cycling for lines. Provided kwargs (including overriding color) will be passed to the line plotting

The style is meant to match that produced by seaborn.lineplot, but on numpy arrays and with way less overhead (i.e., not putting it into a pandas dataframe and using the seaborn plotting). It doesn't support a lot of the fancy extras of its seaborn cousin.

Note: This uses numpy's nan-functions (e.g., *nanmean* and *nanstd*) so your data can include nan values, and they will not contribute to summary statistic plots.

Parameters

- **x** (np.ndarray) (n,) shape array of x-values to plot
- y (np.ndarray) (m, n) shape array of y-values to plot, where m is the number of trials
- ctr_type (str, optional) Which central statistic to plot is the primary summary metric. Options are 'mean' and 'median'. (the default is 'mean', which uses numpy.nanmean)
- err_type (str, optional) Which error type to show for shading. Options are:
 - std: Standard deviation
 - 95ci: 95% confidence interval
 - quartile: [25%, 75%] confidence interval
 - None: No error plotting

(the default is 'std', which is standard deviation)

• **show_trials** (bool, optional) – Whether or not to show plots of the individual trials (each row of y data). (the default is False, which means only summary data shown)

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