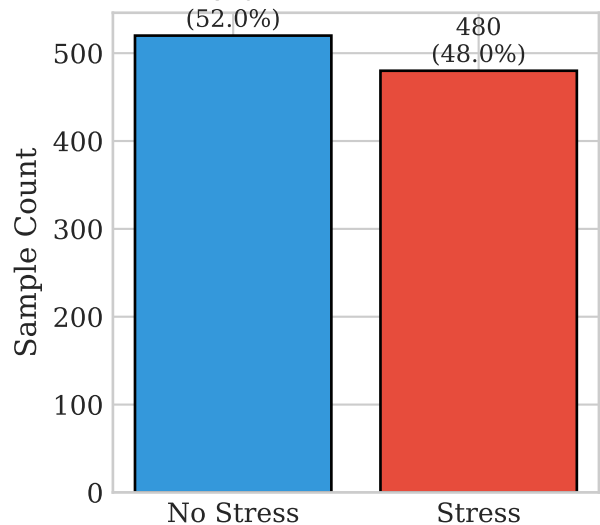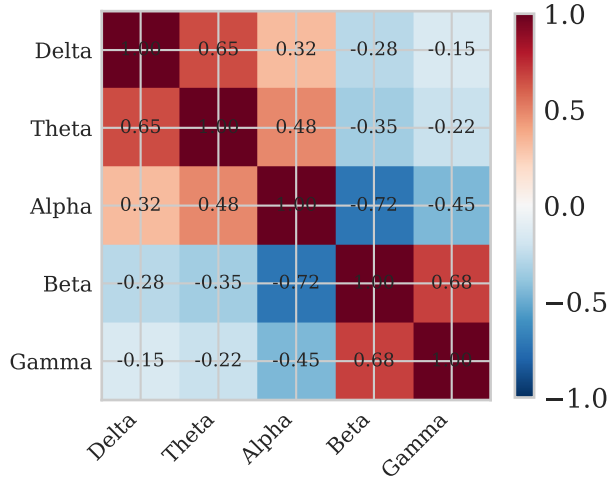# Exploratory Data Analysis (EDA) Dashboard
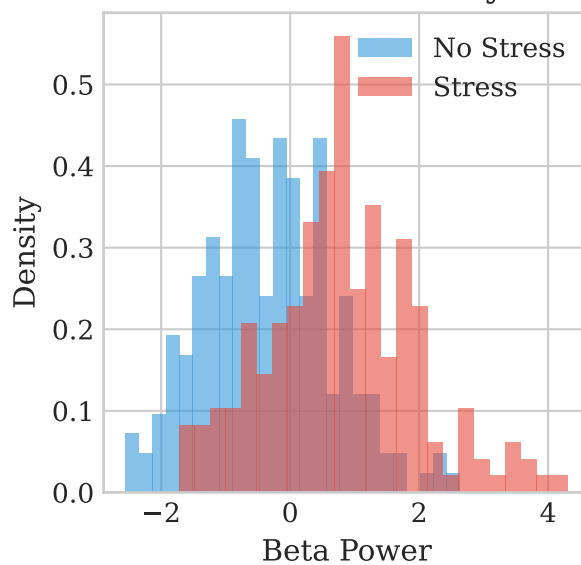
Class Distribution
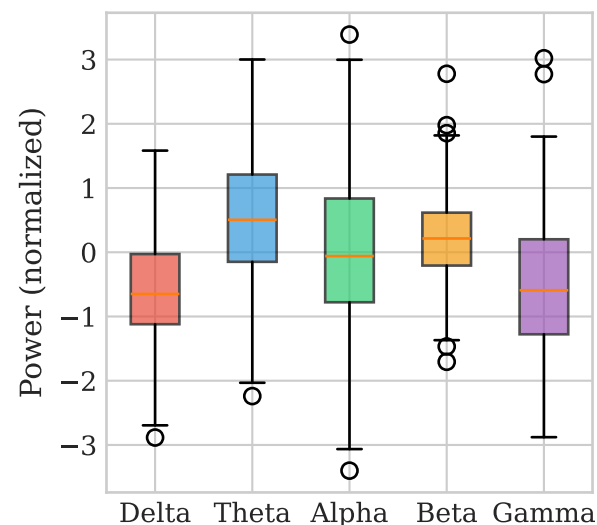
Feature Correlation

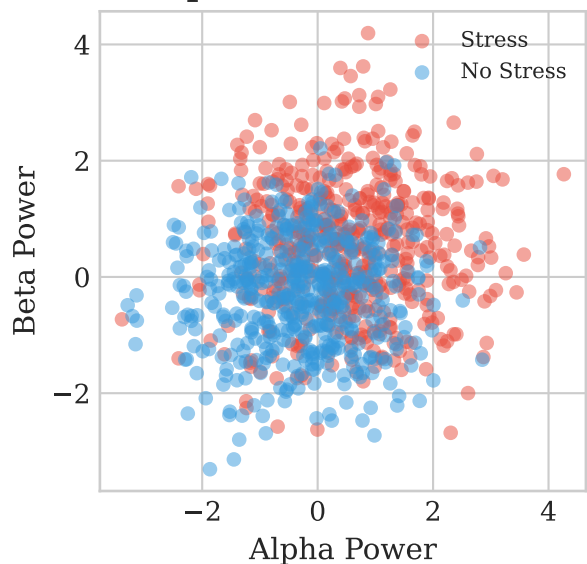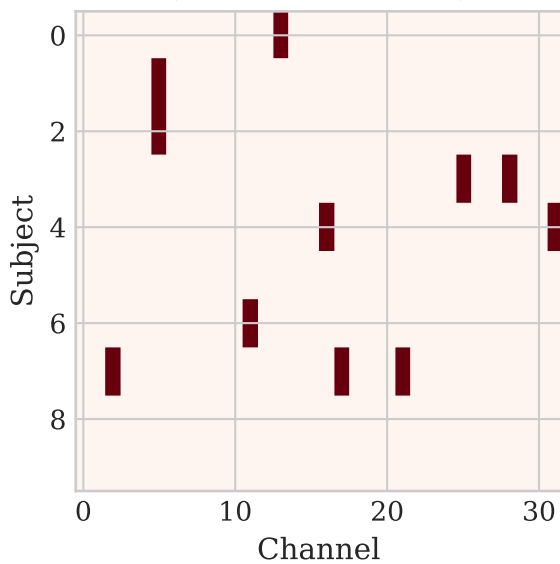|	Delta	Theta	Alpha	Beta	Gamma
Delta		0.65	0.32	-0.28	-0.15
Theta	0.65		0.48	-0.35	-0.22
Alpha	0.32	0.48		-0.72	-0.45
Beta	-0.28	-0.35	-0.72		0.68
Gamma	-0.15	-0.22	-0.45	0.68	

Feature Distribution by Class

Feature Box Plots

Alpha vs Beta Scatter
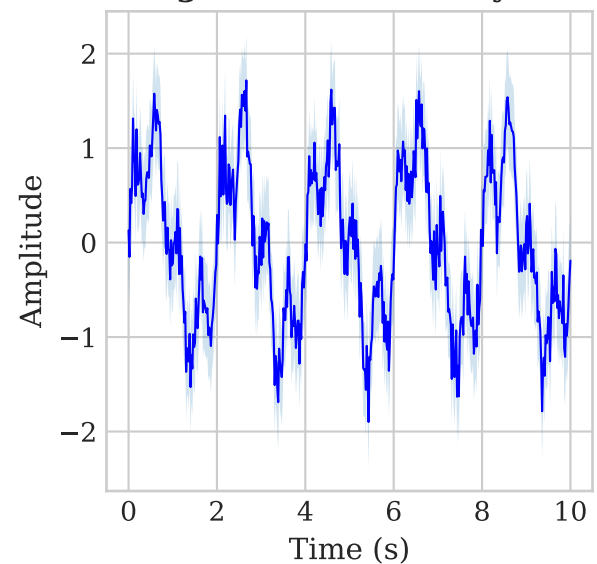
Missing Values
(11 / 320 = 3.4%)

Outlier Detection
(5 outliers)

Upper: 3.00
Lower: -3.00
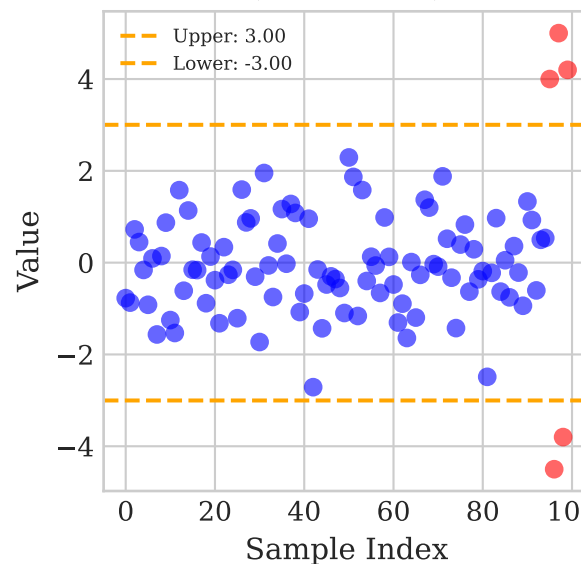
Signal Pattern Analysis

Dataset Summary Statistics

Statistic	DEAP	SAM-40	WESAD
Subjects	32	40	15
Samples	1,280	1,200	984
Channels	32	32	32
Sample Rate	128 Hz	128 Hz	700 Hz
Duration	60s	120s	~120min
Classes	2	2	3
Imbalance	1:1	1:1.2	1:1:1

PCA Variance Analysis

Cumulative
95% threshold
Individual