

CE 8930 – Structural Health Monitoring, Spring 2014

7th Class Exercise

The concept of Shock Response Spectrum (SRS) was developed in the early 1960's by the engineers of the U.S. Department of Defense. It represents any arbitrary transient time-domain data in terms of how a single dof system would respond to it. There is a script available for the calculation of SRS on Blackboard.

Temporal moments represent the higher order statistics (3rd order and higher) of any data. They contain information of the time domain response beyond the conventional techniques that focus on lower-order statistics (mean and standard deviation). There is a script available for the calculation of temporal moments on BB.

Download the provided scripts, and use the experimental data you collected from the plate last week to extract SRS and temporal moments as features.