

CE 8930

Group Assignment #7

Assigned: Thursday, February 27, 2014
Due: Thursday, March 6, 2014 (midnight)

In this assignment, each group is asked to complete a literature survey on *features*. In this assignment, the focus will be on the features that are used for comparing and calibrating simulations against experiments. Examples found may (or may not) use these simulation models for SHM purposes.

Each group is asked to compile two papers (per student) from the published literature. Groups are asked to (i) prepare a 4-page (total) review of these papers, and (ii) prepare a presentation complementing the written report. The presentation should be two slides per paper and should not take longer than 3 minutes per paper.

The following are sample questions that the students are asked to consider. Of course, additional questions and discussions must be added by each group.

- Is the selected feature suitable for the dynamic behavior of interest?
- Is the selected feature sensitive to the parameters that are calibrated in the model?
- Is the selected feature sufficiently insensitive to noise?
- What motivated the selection of features for the authors?
- Is the variability in feature extraction considered in the test-analysis correlation?

Groups are encouraged to include figures and tables from the reviewed papers with proper citation. Please use Times New Roman 11 font with normal margins. Please provide a list of references on a separate page and submit all documents (report, presentation as well as the pdf files for each paper) as a 'zip' file.