AutoOMA on wind turbine Hub
Master project, Anders Olsen, Spring 2017

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Project description

Study of how to do automatic operational modal analysis(AutoOMA) on a wind turbine hub under different loading conditions. The project includes a survey of existing AutoOMA techniques with and without harmonics in the excitation signal. Harmonic removal techniques will be employed. The project will demonstrate how to do model updating using identified parameters. Focus in the project is on experimental validation of algorithms.

Project content

The project will contain many of the topics below

- OMA identification techniques and practices

- Ideas in AutoOMA

- Handling of harmonics in OMA.

- Topics in model updating

- Implementation of test system (MATLAB)

- Implementation of system on Hub